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RESULTS OF THIN SKIN THERMOCOUPLE TESTS CONDUCTED IN THE NASA/ARC 3.5 FT. HYPERSONIC WIND TUNNEL TO DETERMINE HEAT TRANSFER RATES ON A .0275 SCALE SSV ET FOREBODY (FH16)

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

Data Management Services
SPACE DIVISION CHRYSLER CORPORATION

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by

Harry R. Carroll - Martin Marietta

Prepared under NASA Contract Number NAS9-13247

by

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Slidell, La. 70458

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number:	ARC 3.5 HWT-247
NASA Series Number:	FH16
Model Number:	--
Test Dates:	May 15 - June 2, 1978
Occupancy Hours	112 Hours

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ABSTRACT

An existing $10^{o}/40^{o}$ spike on the nose of a .0275 scale thin skin ET forebody heat transfer model was modified in an effort to improve wind vector sensoring for the Shuttle Ascent Air Data System (AADS). The change truncated 7.635 inches full scale of the 10^{o} cone and replaced it with a 30^{o} cone, thus, causing the differential pressures to be higher and more sensitive for the AADS angle-of-attack and side-slip flight evaluation. The model was instrumented with 250 thermocouples (T/C) to obtain complete heating data around the forward fairing and the brackets that support the trays and GO_2 pressurization line. The Mach number tested was 5.3 at Reynolds Number/foot of 5.0×10^{6}, at selected $\alpha = 0, \pm 5$ and $\beta = 0, \pm 6, +9$. The test conditions were repeated with protuberances on and off to provide a matrix of heating interference factors on the skin around all perturbed flow areas. The temperature recovery factors were computed according to a method provided by Rockwell International/Space Division.

The data results indicate the magnitude of heating and location of shock impingement on the 40^{o} Vent Cap Cone has been well established to occur on the Vent Cap within 0.10 inch, model scale. The bracket induced heat factors are similar over the full length of the ogive.

*Martin Marietta Corporation

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NOMENCLATURE

SYMBOL	DEFINITION
b	Thickness of model skin, inches
C	Specific heat of model skin, Btu/lbm-°R
C_0, C_1, C_2	Constants in curve fit for "C" over model wall temperature range.
C_p	Specific heat of air stream (perfect gas value) Btu/lbm-°R
CHAN	Recording system channel
H_{aw}	Adiabatic wall enthalpy, Btu/lbm
H_t or HT	Free-stream total enthalpy, Btu/lbm
H_{wi}	Enthalpy based on model wall temperature for given T/C location at initial time, Btu/lbm
h or H	Heat transfer coefficient at model wall for given T/C location, lbm/ft^2-sec.
h_s or HS	Stagnation-point heat-transfer coefficient for reference sphere, lbm/ft^2-sec.
h/h_s or H/HR, or H9/HR, H85/HR	Ratio of model heat-transfer coefficient to heat-transfer coefficient of reference sphere for H_{aw}/H_t = x.xxx
L or LREF	Model reference length - ft. = 4.297 ft. (L = 1845.53 inches x .0275 = 50.752 inches for FH-16)
M or MACH	Free-stream Mach number
P_t or PT	Free-stream total pressure, psia
$\dot{q}$, QDOT	Heat transfer rate at model wall for given T/C location, Btu/ft^2-sec; $\dot{q} = h\ (H_{aw} - H_w)$

NOMENCLATURE (Continued)

SYMBOL	DEFINITION
$\dot{q}_s$ or QREF	Stagnation point heat-transfer rate for reference sphere at initial time, Btu/ft^2-sec; $(H_t - H_{wi})\ h_s = \dot{q}_s$
R or HW/HT	Enthalpy Recovery ratio, H_{aw}/H_t
R_s or RS	Reference sphere radius at model scale equivalent to 0.3048 meter (1.0 ft) for a full scale vehicle. R_s = .0275 ft for FH-16.
R_e/ft or RN/FT	Free-stream Reynolds number per foot, $\rho_\infty V_\infty/\mu_\infty$, 1/ft
R_e or REL	Free-stream Reynolds number based on model reference length L.
S_t (x.xxx) or STN NO	Stanton number based on free-stream flow conditions model heat-transfer coefficient for H_{aw}/H_T = x.xxx.
T or TINF	Free-stream static temperature
T_t or TT	Free-stream total temperature
T_{wi} or TW	Model wall temperature for given T/C location at initial time.
T/C	Thermocouple
$(T/C)_S$	Thermocouple Schedule
t	Time, sec
T_i or TIME	Initial time (before model insertion into flow) extrapolated from $f(T_w)$ vs time
v, VINF	Velocity, ft/sec
W	Density of model skin material, Lb/ft^3
X_m	Model distance from theoretical tip of 10° cone (STA. 321.7 on EXTERNAL TANK SYSTEM)

NOMENCLATURE (Concluded)

SYMBOL	DEFINITION
X/L_{REF} or X/Lref	Longitudinal distance in Shuttle External Tank coordinate system, $X/L_{REF} = X_m/L_{ref} - .0027$
Y	Lateral distance from X-Z plan, positive to right
Z	Vertical coordinate from ET axis of symmetry

Greek Symbols

α or ALPHA	Angle of Attack, degrees
β or BETA	Angle of Sideslip, degrees
θ or THETA	Angular position of T/C measured clockwise viewing forward top meridian $\theta = 0^\circ$, degrees
μ or MU	Viscosity of Air
ρ or RHO	Density of Air

Subscripts

aw	Adiabatic wall
i	Initial value before insertion into tunnel flow
PG	Perfect gas (Calorically and thermally perfect gas)
s	Reference sphere or stagnation value
t, T	Free-stream total condition
w	Wall value
∞	Free-stream condition

INTRODUCTION

A spike on the nose of the Space Shuttle External Tank serves both as a lighting arrestor and as a probe to measure pressures utilized in the Ascent Air Data System (AADS). A feasibility test for the AADS was conducted in IA137 (Reference 1). A special treatment of that data was performed by the Data Management System and is given in Reference 2. The probe configuration of a sharp $10^{o}/40^{o}$ conical spike was causing some variations in static pressure measurements and it was felt by Rockwell International that a more blunt spike would stabilize the bow shock location over the attitude range of interest and give more reliable pressure readings. Therefore, it was proposed to truncate the forward 7.635 inches (full scale) of the 10^{o} cone and replace it with a 30^{o} cone 2.418 inches in length yielding a $30^{o}/10^{o}/40^{o}$ conical spike configuration as can be seen in Figures 1 and 2. This wind tunnel test (FH16) and a companion test in the AEDC VKF Tunnel A, (FH15) Reference 3, were proposed to:

1. determine the change in heating, if any, due to the small change in the nose spike configuration;
2. measure the interference heating on the surface around the forward fairing, trays, GOX line and brackets with these protuberances both present and removed.

The FH16 test results are contained in this report and were obtained using the thin-skin thermocouple technique to collect heat transfer data, and shadowgraphs and oil flow photographs to visualize the flow field. Data were obtained at Mach number 5.3, and free-stream Reynolds number 5.0 million per foot. Model angle of attack was 0^{o} and $\pm 5^{o}$ at sideslip angles of -6^{o} to 9^{o}. Sample T/C data plots and complete tabulation are included herein. Shadowgraph and oil flow photographs are retained by the author and are available on request.

CONFIGURATIONS INVESTIGATED

The heat flux model utilized in this test was a .0275 scale, thin skin (t = .030 inch ±.005 inch) ET forebody designated as the 30°/10°/40° cone - ogive. The model was tested previously with a 10°/40° spike in test series FH14, Reference 4. Constructed of 304 stainless steel, spot check measurements using ultrasonic thickness measuring instruments revealed excellent agreement of material thickness, typically within .001 inch. Figure 1 shows the model overall configuration with principle dimensions, bracket numbers and peripheral notations of the ogive. Figure 3 depicts the modification made to the old 10°/40° spike to make the new 30°/10°/40° spike which is the current baseline configuration for the AADS system.

Two configurations were tested, one with all ET nose hardware, or protuberances on, the other with hardware removed.

Figures 6 through 8 are examples of the data plots made by Chrysler Data Management Systems (DMS) for data analysis. The complete set is available on request from the DMS. Figure 6 depicts heating ratios existing along the ET body at some common ray for flow conditions of Mach 5.3, Reynolds Number per unit length of 5×10^6, angle-of-attack -5°, and angle of sideslip -6°. Undisturbed and interference heating coefficients are given ratioed to the reference value and then the HI/HU ratio is also shown. In Figure 7 only the HI/HU values are plotted, but they are depicted for one thermocouple exposed to varying flow conditions (angle-of-attack and sideslip). Figure 8 summarizes the data for several flow conditions showing HU/HREF, HI/HREF, and HI/HU in Figures 8A, 8B, and 8C, respectively. The nose profile has been added to these plots for visual assistance.

TEST FACILITY DESCRIPTION

The NASA-Ames 3.5-Foot Hypersonic Wind Tunnel is a closed-circuit, blowdown-type tunnel capable of operating at nominal Mach numbers of 5, 7, and 10 at pressures of 1800 psia and temperatures to 3400°R for run times to four minutes. The major components of the facility include a gas storage system where the test gas is stored at 3000 psi, a storage heater filled with aluminum-oxide pebbles capable of heating the test gas to 3400°R, axisymmetric contoured nozzles with exit diameters of 42 inches for generating the desired Mach number, and a 900,000 ft^3 vacuum storage system which operates to pressures of 0.3 psia. The test section itself is an open-jet type enclosed with a chamber approximately 12 feet in diameter and 40 feet in length, arranged transversally to the flow direction.

A model support system is provided that can pitch models through an angle of attack range of -20 to +20 degrees, in a vertical plane, about a fixed point of rotation on the tunnel centerline. This rotation point is adjustable from 1 to 5 feet from the nozzle exit plane. The model normally is out of the test stream (strut centerline 37 inches from tunnel centerline) until the tunnel test conditions are established, after which it is inserted. Insertion time is adjustable to as little as 1/2 second, and models may be inserted in any strut angle.

A high-speed, analog-to-digital data acquisition system is used to record test data on magnetic tape. The present system is equipped to measure and record the outputs from 80 transducers in addition to 20 channels of tunnel parameters.

INSTRUMENTATION

The original 150 T/Cs utilized during test FH14 were 40 AWG Cromel-Constantan (Type E) cross-welded to the inner surface of the .030 inch thick model stainless steel skin, as described in Reference 5. The 40 AWGs were twist-spliced to 30 AWG Type E glass on glass insulated lead wire, 40 ft. long. The splices were unsoldered, but fitted with heat shrunk Teflon insulators. Due to age and shipping and handling, some of these were coming loose and were repaired using solder on all splices. An additional 10 ft. of 26 AWG was soldered onto the 150 30 AWG leads to reach the junction box at Tunnel "A".

To more adequately define the heating rates around the protuberances, 100 new 40 AWG thermocouples were added, but the junctions were beaded and then welded to the inner surface of the skin, forming a stronger connection and more definite body location. No change in millivolt output or rates were detected between the two junction techniques for gages as close, physically, as 0.10 inch. The 40 AWGs were solder-spliced to 26 AWG Type E leads with a much improved Kapton insulated lead wire 50 ft. long.

Six new T/Cs were installed on the cable tray fairing in areas of the leading edge and corners to measure the high heating typical of these type of protuberances. The remaining new gages were systematically distributed around all the brackets, except at the forebody parting section Xm = 7.502 ($X/_{LREF}$ = .1451) (Bracket 7) and Bracket 11 at the end of the model ogive, Xm = 12.062 inches ($X/_{LREF}$ = .2350).

Figure 4 depicts the T/C locations along the ET nose in the region of the protuberances while Table II gives the pertinent dimensional information.

DATA REDUCTION

(This section provided by William K. Lockman of NASA Ames Research Center)

All test data were reduced at the NASA-Ames Research Center using the data-reduction techniques outlined below. The thermocouple data were reduced using the one-dimensional, thin-wall equation:

$$\dot{q} = WCb \frac{dT_w}{dt} = h\,(H_{aw} - H_w) \equiv hH_t \left(\frac{H_{aw}}{H_t} - \frac{H_w}{H_t}\right) \tag{1}$$

which neglects heat-conduction losses.

Assuming that W and h are constant and

$$C = C_o + C_1 T_w + C_2 T_w^2 \text{ for } T_w \text{ ranges} \tag{2}$$

the integration of equation (1) for $t = t_i$ to t and $T_w = T_{w_i}$ to T_w yields the linear equation:

$$f(T_w) = -\ell n\left(\frac{T'_{aw} - T_w}{T'_{aw} - T_{w_i}}\right) - \left[\frac{C_1}{C'_{aw}} + \frac{C_2}{C'_{aw}}\left(T'_{aw} + \frac{T_w + T_{wi}}{2}\right)\right](T_w - T_{w_i})$$

$$= \frac{HC_p}{WC'_{aw}b}\,(t - t_i) \tag{3}$$

where it is defined that:

$$T'_{aw} \equiv \frac{H_{aw}}{C_p} \equiv \frac{H_{aw}}{H_t} \cdot \frac{H_t}{C_p} \geq (T_{aw})_{PG} \tag{4}$$

$$C'_{aw} \equiv C_o + C_1 T'_{aw} + C_2 T'^2_{aw} \tag{5}$$

$\neq$ specific heat at adiabatic wall temperature.

The form of Equation (3) is $f(T_w) = mt + a$ where m is the slope and a is the intercept for a straight line if heat-conduction errors are negligible. Thus, deviations from a straight line can indicate heat-conduction effects.

The slope, m, of $f(T_w)$ vs t from Equation (3) is computed by a least-squares, straight-line fit over a finite time interval (approximately 1 second) beginning when the model reaches uniform tunnel flow. The value of heat-transfer coefficient, h is then determined from:

$$h = \frac{WC'_{aw}{}^{b}_{m}}{C_p} \tag{6}$$

Using this value of h, the heat-transfer rate is evaluated at the initial time, t, when the model is isothermal at the initial wall enthalpy, H_{wi}

$$\dot{q} = \dot{q}_i = h\,(H_{aw} - H_{wi}) \equiv hH_t\,\left(\frac{H_{aw}}{H_t} - \frac{H_{wi}}{H_t}\right) \tag{7}$$

where H_{aw}/H_t is the same value used to evaluate h. The resultant value of $\dot{q}$ is independent of the value of H_{aw}/H_t used for both the h and $\dot{q}$ evaluations.

The reference sphere heating is also evaluated at the initial wall enthalpy by the method of Fay and Riddell (Reference 5):

$$\dot{q}_s = h_s\,(H_t - H_{wi}) \equiv h_s H_t\,\left(1.0 - \frac{H_{wi}}{H_t}\right) \tag{8}$$

The model-to-sphere ratio of heat-transfer coefficients is then determined from Equations (7) and (8) as

$$\frac{h}{h_s} = \frac{\dot{q}_i}{\dot{q}_s}\;\;\frac{1.0 - H_{wi}/H_t}{H_{aw}/H_t - H_{wi}/H_t} \tag{9}$$

where $\dot{q}_i$ is constant for all values of H_{aw}/H_t.

To determine h/h_s for various values of H_{aw}/H_t, the particular value of H_{aw}/H_t is substituted into Equation (9).

The Stanton number is defined as

$$St \equiv \frac{h}{\rho u} = \frac{\dot{q}i}{\rho u \left(H_{aw} - H_{wi}\right)} \tag{10}$$

where for free-stream conditions, $\rho u = \rho_\infty V_\infty$.

The calculations of the model heating, reference sphere heating, and Reynolds number included the corrections of NACA report 1135 (Reference 6) for calorically imperfect, thermally perfect air. Keyes' equation for viscosity (see Reference 7) was also used for the sphere heating and Reynolds number computations:

$$\mu = \frac{0.032 \times 10^{-6} \, T^{0.5}}{1 + \frac{220}{T} \times \sim 10^{-9/T}} \tag{11}$$

where the units for T and μ are $^\circ R$ and $lb\text{-}sec/ft^2$, respectively.

REFERENCES

1. "Results of Test IA137 in the NASA/ARC 14 Foot Transonic Wind Tunnel on the 0.07 Scale External Tank Forebody (Model 68-T) to Determine Auxiliary Aerodynamic Data System Feasibility," Chrysler DMS-DR-2316, NASA-CR-147, 622.

2. "AADS Wind Vector Sensing System from IA137 Data," Chrysler Data Management System Special Request SPRT I4, dated August, 1976.

3. "Results of Thin Skin Thermocouple Test Conducted in the AEDC VKF Tunnel A to Determine Heat Transfer Rates on a 0.0275 Scale SSV ET Forebody (FH15)," Chrysler DMS-DR-2422, NASA CR-151, 767.

4. "Results of Wind Tunnel Tests to Determine Heat Transfer Rates on a .0275 Scale Space Shuttle External Tank with a 10°/40° Double-Cone-Ogive Nose in the NASA/ARC 3.5 Ft. Hypersonic Tunnel (FH14)," Chrysler DMS-DR-2313 3 volumes; NASA CR-151, 041.

5. "Heat Transfer and Surface Pressure Data Obtained on a 0.0429 Model SSV External Tank Nose Section at Mach Numbers from 2.5 to 5.5 (FH13)," Chrysler DMS-DR-2276; NASA CR-151, 055.

6. Test Facilities Handbook (Tenth Edition) "Von Karman Gas Dynamics Facility, Vol. 4" Arnold Engineering Development Center, May, 1974.

7. "External Tank, Data Report for Heat Transfer Test FH-14 on a .0275 Scale ET 10°/40° Double Cone Ogive in the NASA-Ames 3.5 Foot Hypersonic Wind Tunnel Facility," MMC-ET-SE05-70, H. R. Carroll, May, 1976.

8. "External Tank, Data Report for Supersonic Heat Transfer and Pressure Test (FH-13) on the .0473 Scale ET Double Cone Nose and Ogive in the AEDC-VKF Tunnel "A" Facility," MMC-ET-SE-05-65, H. R. Carroll, October, 1975.

9. "Pretest Report for Supersonic Heat Transfer Tests on the .0275 Scale ET Forebody (FH-16) in the NASA/Ames 3.5' HWT Facility," Memo 3552-78-50, H. R. Carroll, 8 April 1978.

10. "Equations, Tables, and Charts for Compressible Flow," NACA Report 1135, Ames Research Staff, 1953.

TABLE I.

TEST : FH-16		DATE :	

TEST CONDITIONS
(NOMINAL)

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
5.3	5.0×10^6	406	840

BALANCE UTILIZED: None

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF			
SF			
AF			
PM			
RM			
YM			

COMMENTS: See Data Precision Section for measurement uncertainties.

TABLE II. THERMOCOUPLE DIMENSIONAL LOCATIONS

TC NO.	THETA	X/L	DEL Y
1	0.0000	0.0091	N/A
2	0.0000	0.0111	
3	0.0000	0.0131	
4	0.0000	0.0150	
5	0.0000	0.0170	
6	0.0000	0.0190	
7	0.0000	0.0209	
8	45.0000	0.0229	
9	0.0000	0.0249	
10	0.0000	0.0269	
11	0.0000	0.0288	
12	0.0000	0.0328	
13	0.0000	0.0367	
14	0.0000	0.0406	
15	0.0000	0.0485	
16	0.0000	0.0564	
17	0.0000	0.0761	
18	0.0000	0.0958	
19	0.0000	0.1155	
20	0.0000	0.1648	
21	0.0000	0.1945	
22	0.0000	0.2140	
23	180.0000	0.0091	
24	180.0000	0.0111	
25	180.0000	0.0131	
26	180.0000	0.0150	
27	180.0000	0.0170	
28	180.0000	0.0190	

TC NO.	THETA	X/L	DEL Y
29	180.0000	0.0209	N/A
30	225.0000	0.0229	
31	180.0000	0.0249	
32	180.0000	0.0288	
33	180.0000	0.0328	
34	180.0000	0.0367	
35	180.0000	0.0406	
36	180.0000	0.0485	
37	180.0000	0.0564	
38	180.0000	0.0761	
39	180.0000	0.0958	
40	180.0000	0.1155	
41	180.0000	0.1648	
42	180.0000	0.1845	
43	180.0000	0.2140	
44	90.0000	0.0091	
45	90.0000	0.0111	
46	90.0000	0.0131	
47	90.0000	0.0150	
48	90.0000	0.0170	
49	135.0000	0.0190	
50	90.0000	0.0209	
51	135.0000	0.0229	
52	90.0000	0.0249	
53	90.0000	0.0269	
54	90.0000	0.0288	
55	90.0000	0.0328	
56	90.0000	0.0367	

TABLE II. - THERMOCOUPLE DIMENSIONAL LOCATIONS - Continued.

TC NO.	THETA	X/L	DEL Y
57	90.0000	0.0406	N/A
58	90.0000	0.0485	
59	90.0000	0.0564	
60	90.0000	0.0761	
61	90.0000	0.0958	
62	90.0000	0.1155	
63	270.0000	0.0091	
64	270.0000	0.0111	
65	270.0000	0.0131	
66	315.0000	0.0150	
67	270.0000	0.0170	
68	315.0000	0.0190	
69	270.0000	0.0209	
70	315.0000	0.0229	
71	270.0000	0.0249	
72	270.0000	0.0269	
73	270.0000	0.0288	
74	270.0000	0.0328	
75	270.0000	0.0367	
76	270.0000	0.0406	
77	270.0000	0.0485	
78	270.0000	0.0564	
79	270.0000	0.0761	
80	270.0000	0.0958	
81	270.0000	0.1155	
82	31.5000	0.0091	
83	31.5000	0.0111	
84	31.5000	0.0142	
85	31.5000	0.0160	N/A
86	31.5000	0.0176	
87	31.5000	0.0194	
88	10.0000	0.0229	
89	20.0000	0.0249	
90	10.0000	0.0269	
91	20.0000	0.0288	
92	10.0000	0.0308	
93	20.0000	0.0328	
94	10.0000	0.0347	
95	33.9000	0.0338	0.0500
96	33.7000	0.0367	0.0500
97	33.6000	0.0393	0.0500
98	27.4000	0.0401	-0.1000
99	33.5000	0.0401	0.0500
100	39.7000	0.0401	0.2000
101	19.8000	0.0408	-0.2900
102	27.6000	0.0416	-0.1000
103	33.5000	0.0416	0.0500
104	39.3000	0.0416	0.2000
105	23.0000	0.0420	-0.2200
106	18.5000	0.0442	-0.3500
107	22.4000	0.0442	-0.2500
108	44.6000	0.0442	0.3500
109	48.4000	0.0442	0.4500
110	28.0000	0.0469	-0.1000
111	33.2000	0.0468	0.0500
112	38.5000	0.0468	0.2000

TABLE II. - THERMOCOUPLE DIMENSIONAL LOCATIONS - Continued.

TC NO.	THETA	X/L	DEL Y	TC NO.	THETA	X/L	DEL Y
113	34.2000	0.0483	0.0500	141	38.9000	0.0822	0.3500
114	28.4000	0.0535	-0.1000	142	41.1000	0.0822	0.4500
115	33.0000	0.0535	0.0500	143	29.6000	0.0925	-0.1000
116	37.6000	0.0535	0.2000	144	32.5000	0.0925	0.0500
117	28.7000	0.0586	-0.1000	145	35.3000	0.0925	0.2000
118	32.9000	0.0586	0.0500	146	29.7000	0.1000	-0.1000
119	37.1000	0.0596	0.2000	147	32.4000	0.1000	0.0500
120	23.4000	0.0596	-0.2900	148	35.1000	0.1000	0.2000
121	28.8000	0.0604	-0.1000	149	27.2000	0.1027	-0.2500
122	32.9000	0.0604	0.0500	150	37.8000	0.1027	0.3500
123	37.0000	0.0604	0.2000	151	12.0000	0.0121	
124	25.5000	0.0607	-0.2200	152	12.0000	0.0176	
125	22.2000	0.0629	-0.3500	153	13.0000	0.0194	
126	24.9000	0.0629	-0.2500	154	51.0000	0.0121	
127	40.9000	0.0629	0.3500	155	51.0000	0.0176	
128	43.6000	0.0629	0.4500	156	50.0000	0.0194	
129	29.0000	0.0657	-0.1000	157	9.0000	0.0150	
130	32.8000	0.0657	0.0500	158	9.0000	0.0176	
131	36.5000	0.0657	0.2000	159	9.0000	0.0194	
132	32.7000	0.0674	0.0500	160	35.3000	0.0221	0.0500
133	29.2000	0.0724	-0.1000	161	35.2000	0.0239	0.0500
134	32.7000	0.0724	0.0500	162	65.2000	0.0247	0.4500
135	36.2000	0.0724	0.2000	163	53.2000	0.0247	0.4000
136	29.3000	0.0795	-0.1000	164	9.9000	0.0247	-0.3000
137	32.6000	0.0795	0.0500	165	2.0000	0.0247	-0.4000
138	35.9000	0.0806	0.2000	166	33.4000	0.0428	0.0500
139	24.1000	0.0822	-0.3500	167	47.7000	0.0408	0.4000
140	26.4000	0.0822	-0.2500	168	43.2000	0.0420	0.3000

TABLE II. - THERMOCOUPLE DIMENSIONAL LOCATIONS - Continued.

TC NO.	THETA	X/L	DEL Y
169	14.6000	0.0442	-0.4500
170	51.9000	0.0448	0.5500
171	32.9000	0.0613	0.0500
172	42.6000	0.0595	0.4000
173	41.1000	0.0607	0.3500
174	46.1000	0.0629	0.5500
175	19.6000	0.0629	-0.4500
176	32.6000	0.0608	0.0500
177	40.1000	0.0795	0.4000
178	25.0000	0.0795	-0.3000
179	38.9000	0.0803	0.3000
180	27.2000	0.0803	-0.2000
181	43.4000	0.0822	0.5500
182	21.8000	0.0822	-0.4500
183	32.5000	0.0858	0.0500
184	32.4000	0.1011	0.0500
185	38.7000	0.1000	0.4000
186	25.3000	0.1000	-0.3500
187	36.9000	0.1011	0.3000
188	27.9000	0.1011	-0.2000
189	42.3000	0.1027	0.6000
190	39.5000	0.1027	0.4500
191	25.3000	0.1027	-0.3500
192	22.6000	0.1027	-0.5000
193	32.4000	0.1063	0.0500
194	32.3000	0.1230	0.0500
195	37.9000	0.1210	0.4000
196	35.5000	0.1210	0.2500
197	32.3000	0.1210	0.0500
198	29.9000	0.1210	-0.1000
199	26.7000	0.1210	-0.3000
200	36.3000	0.1220	0.3000
201	26.3000	0.1220	-0.2000
202	40.2000	0.1244	0.5500
203	38.6000	0.1244	0.4500
204	37.0000	0.1244	0.3500
205	27.6000	0.1244	-0.2500
206	26.0000	0.1244	-0.3500
207	24.4000	0.1244	-0.4500
208	32.3000	0.1273	0.0500
209	32.3000	0.1342	0.0500
210	32.8000	0.1668	0.1000
211	36.9000	0.1648	0.4000
212	34.9000	0.1648	0.2500
213	32.2000	0.1648	0.0500
214	30.2000	0.1648	-0.1000
215	27.4000	0.1648	-0.3000
216	35.6000	0.1658	0.3000
217	26.3000	0.1658	-0.2000
218	39.6000	0.1681	0.6000
219	37.6000	0.1681	0.4500
220	36.2000	0.1681	0.3500
221	28.2000	0.1681	-0.2500
222	26.8000	0.1681	-0.3500
223	24.8000	0.1681	-0.5000
224	32.2000	0.1786	0.0500

TABLE II. - THERMOCOUPLE DIMENSIONAL LOCATIONS - Concluded.

TC NO.	THETA	X/L	DEL Y	TC NO.	THETA	X/L	DEL Y
225	32.8000	0.1898	0.1000				
226	36.7000	0.1870	0.4000				
227	34.7000	0.1870	0.2500				
228	32.2000	0.1870	0.0500				
229	30.2000	0.1870	-0.1000				
230	27.6000	0.1870	-0.3000				
231	35.4000	0.1980	0.3000				
232	28.9000	0.1880	-0.2000				
233	39.9000	0.1904	0.6500				
234	37.3000	0.1904	0.4500				
235	36.0000	0.1904	0.3500				
236	28.3000	0.1904	-0.2500				
237	27.0000	0.1904	-0.3500				
238	24.4000	0.1904	-0.5500				
239	32.8000	0.2117	0.1000				
240	34.7000	0.2101	0.2500				
241	32.1000	0.2101	0.0500				
242	30.3000	0.2101	-0.1000				
243	27.7000	0.2101	-0.3000				
244	29.0000	0.2111	-0.2000				
245	40.3000	0.2131	0.7000				
246	37.2000	0.2131	0.4500				
247	35.9000	0.2131	0.3500				
248	28.4000	0.2131	-0.2500				
249	27.1000	0.2131	-0.3500				
250	23.9000	0.2131	-0.6000				

TABLE III.

TEST: FH16 (ARC 3.5HWT-237) DATA SET RUN NUMBER COLLATION SUMMARY DATE

DATA SET IDENTIFIER	*	CONFIGURATION	α	β	RN/FT	φ	M	T/C SCHEDULE 1	2	3	4	5	TEST RUN NUMBER
R3A003		PROTUBERANCES ON	-5	-6	5.0	0	5.3	20	21	22			
05			-5	0				7	6	27			
07			-5	6				25	24	23			
12			0	-6				13	12	11			
14			0	0				2	3	26			
16			0	6				14	15	16			
17			0	9				19	18	17			
23			5	0				8	9	10			
R3A103		PROTUBERANCES OFF	-5	-6						49	47	48	
05			-5	0						32	34	33	
07			-5	6						50	52	51	
12			0	-6						38	40	39	
14			0	0						30	28	29	
16			0	6						43	41	42	
17			0	9						44	46	45	
23			5	0						37	35	36	

*R data sets = Recovery factor of 1.0 data
S 0.9
T 0.85

NOTES:
1. All linear dimensions in inches
2. Model reference length, L = 50.752 in.
3. x_m = 0.00 at 10° cone apex.
4. X/L = x_m/L-0.0027

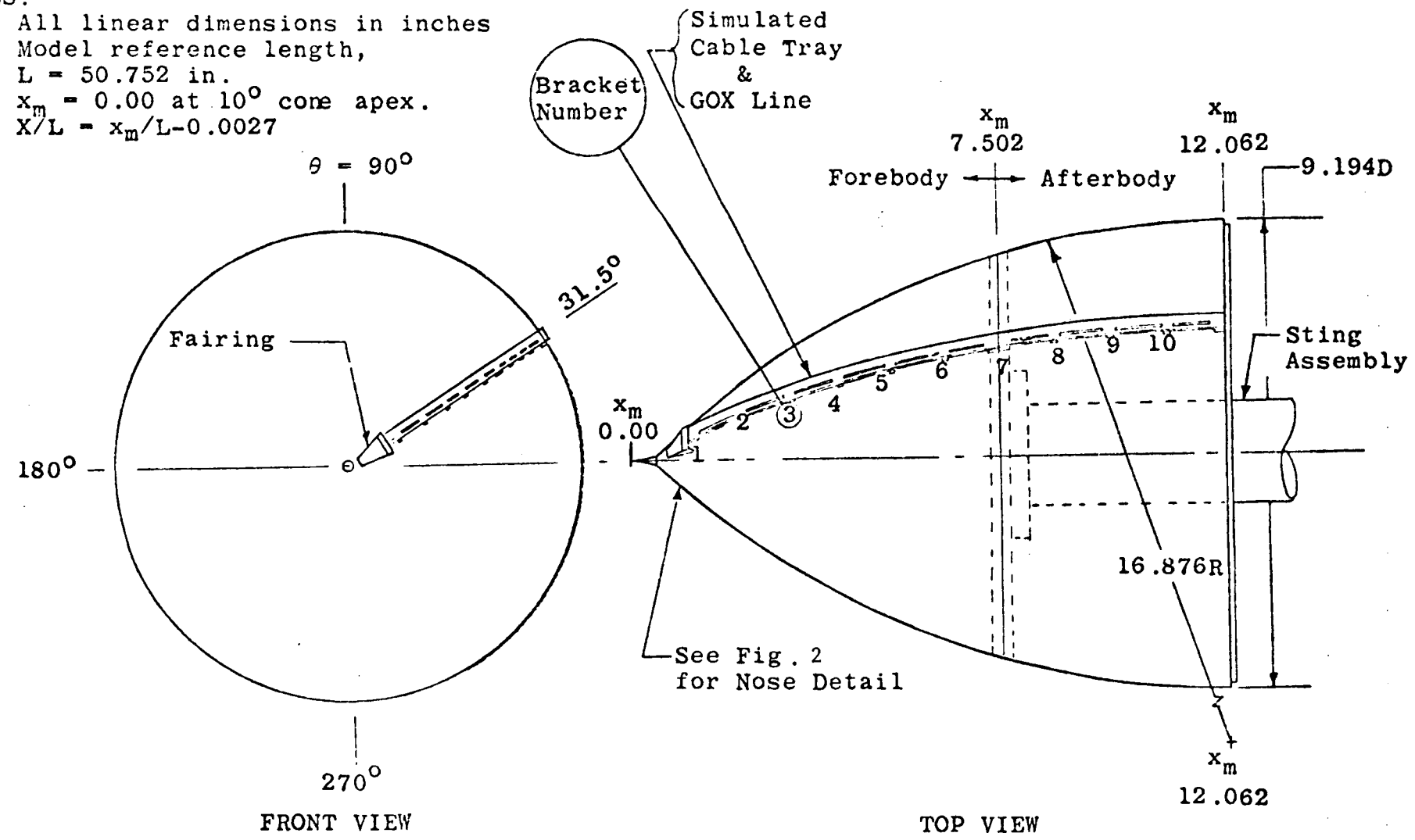
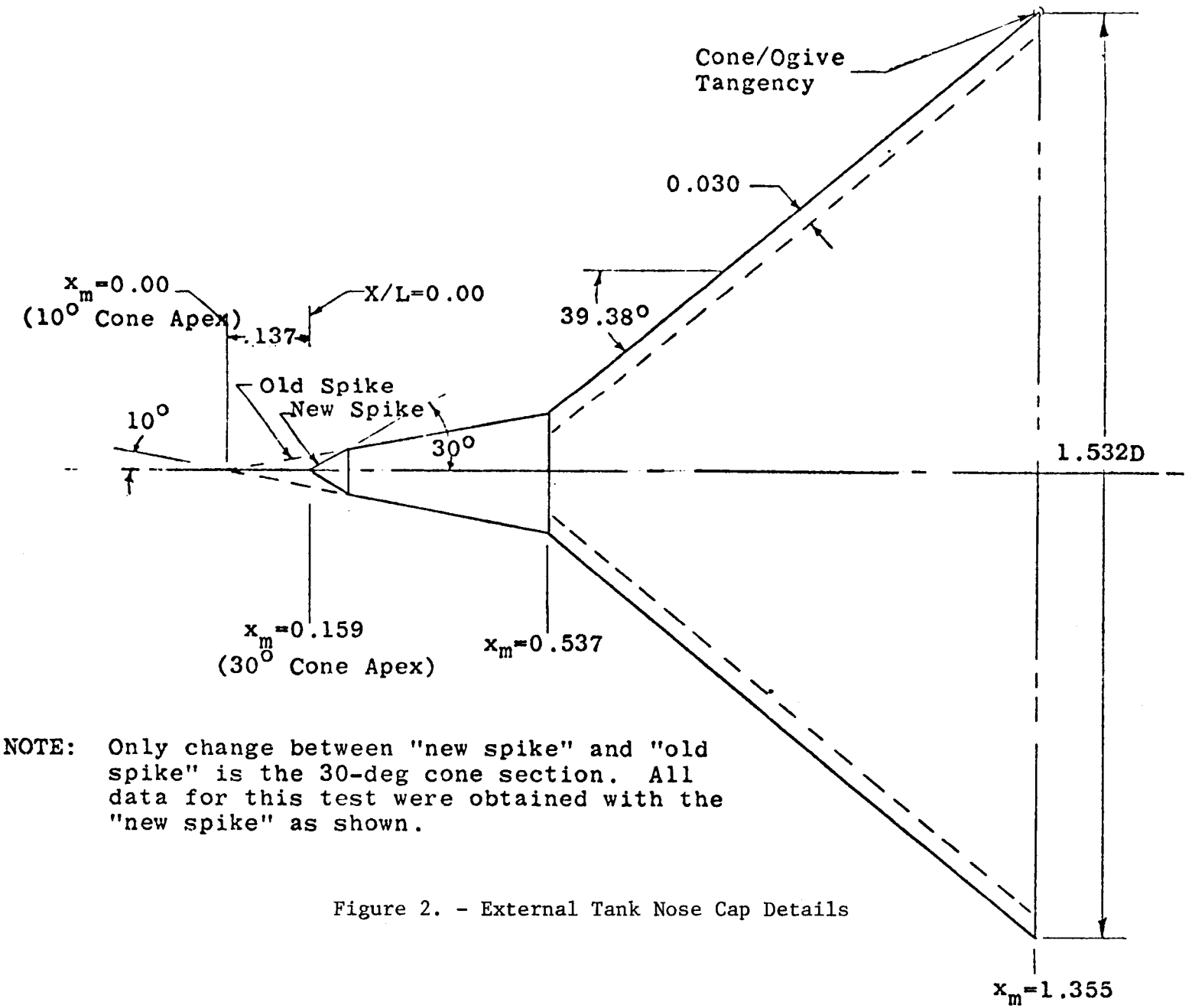


Figure 1. - Model Overall Geometry



NOTE: Only change between "new spike" and "old spike" is the 30-deg cone section. All data for this test were obtained with the "new spike" as shown.

Figure 2. - External Tank Nose Cap Details

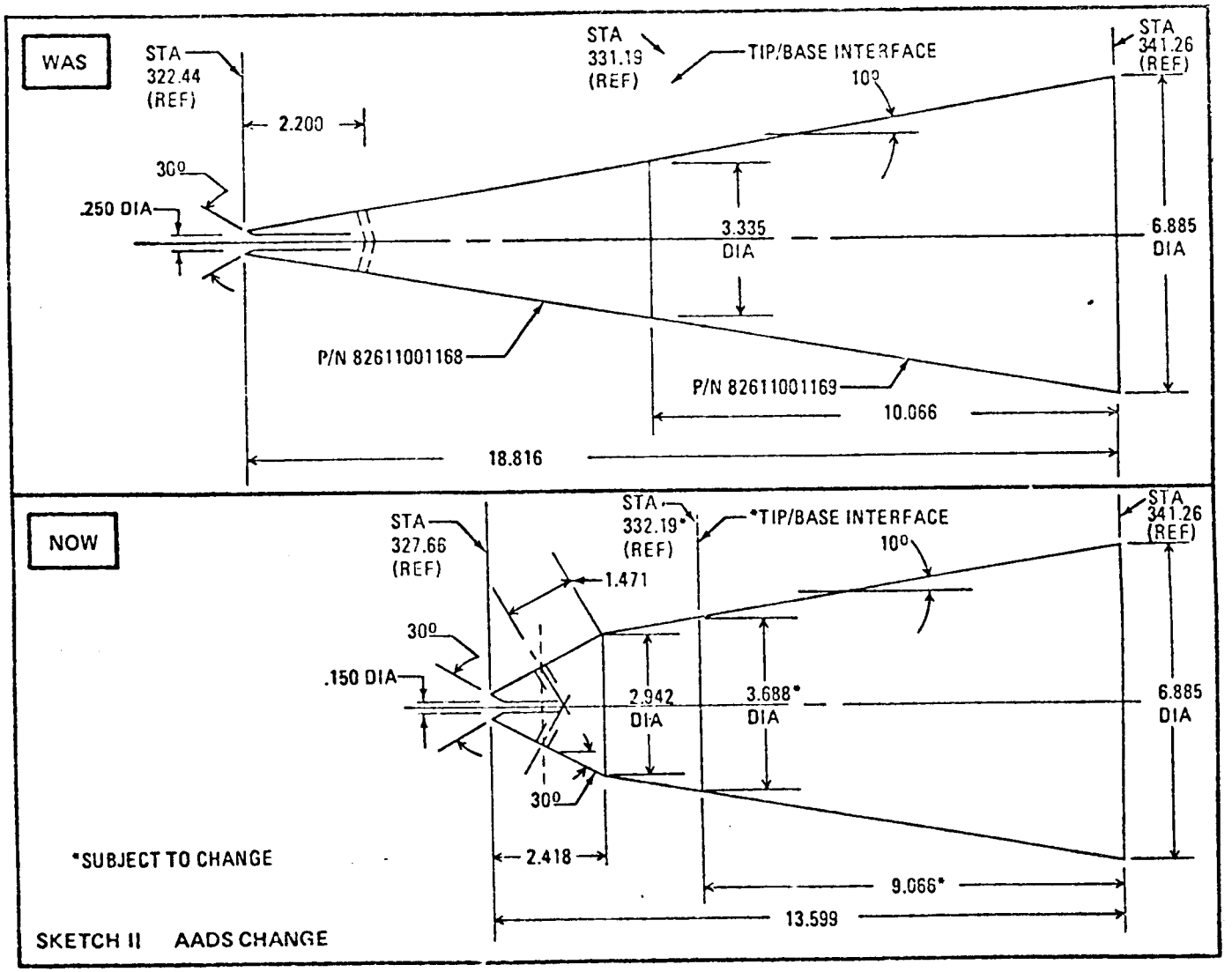
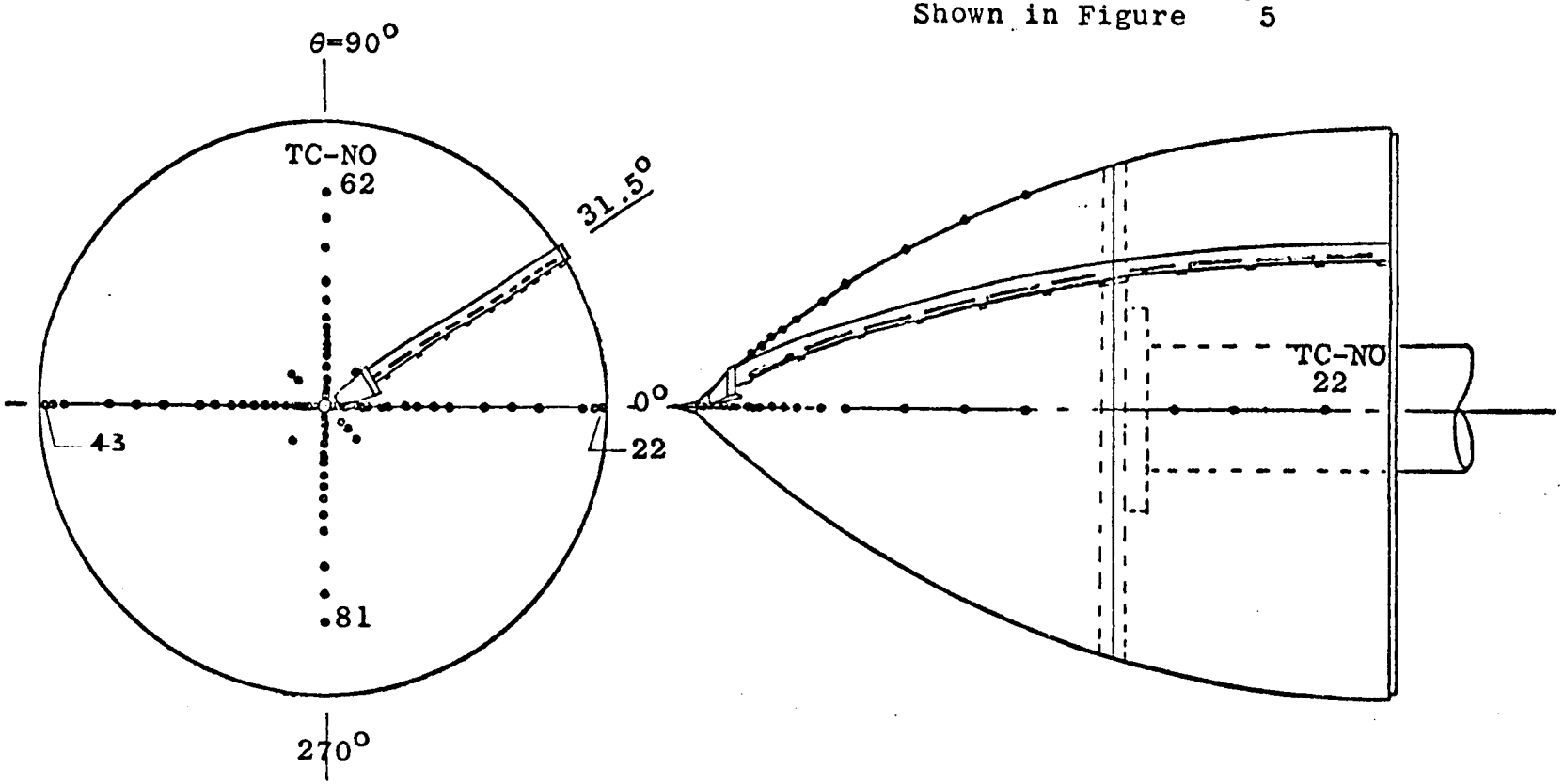


Figure 3. - AADS Probe Geometry

Notes: 1. See Table 1 for Coordinate Information

2. Thermocouples in the Vicinity of the Fairing, Cable Tray and GOX Line are Shown in Figure 5



FRONT VIEW

TOP VIEW

Figure 4. - Thermocouple Locations in Undisturbed Flow Areas

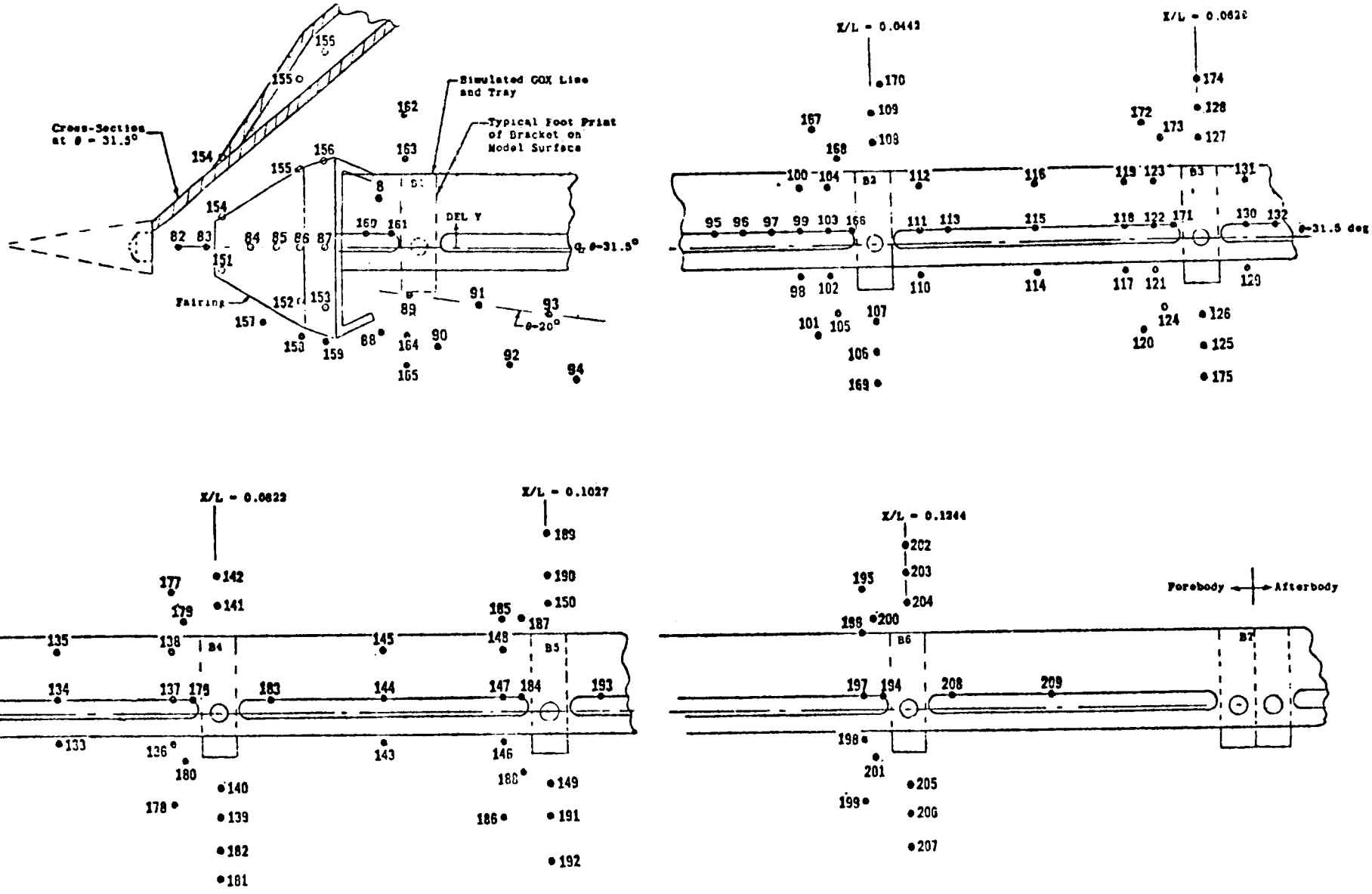


Figure 5. - Thermocouple Locations in the Vicinity of Protuberances

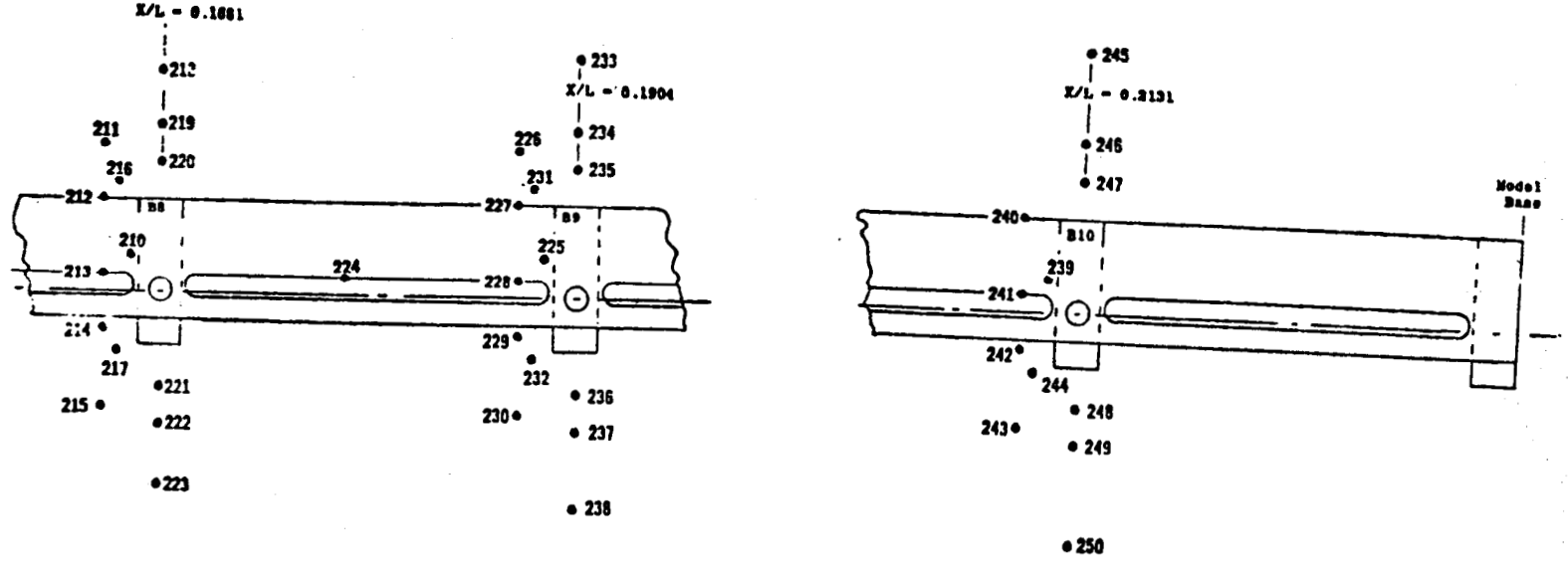


Figure 5. - Concluded

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/FT
(S3A103)	D	FH16, ARC 3.5-237, ET NOSE (CLEAN)	HU/HREF	-5.000	-6.000	5.000
(S3A003)	□	FH16, ARC 3.5-237, ET NOSE (W/PROTUB.)	HI/HREF	-5.000	-6.000	5.000
(S3AR03)	◇	FH16 (W/W TEST) S3A003/S3A103	HI/HU	-5.000	-6.000	5.000
(03A014)	○	FH16 EXTERNAL TANK OGIVE PROFILE				

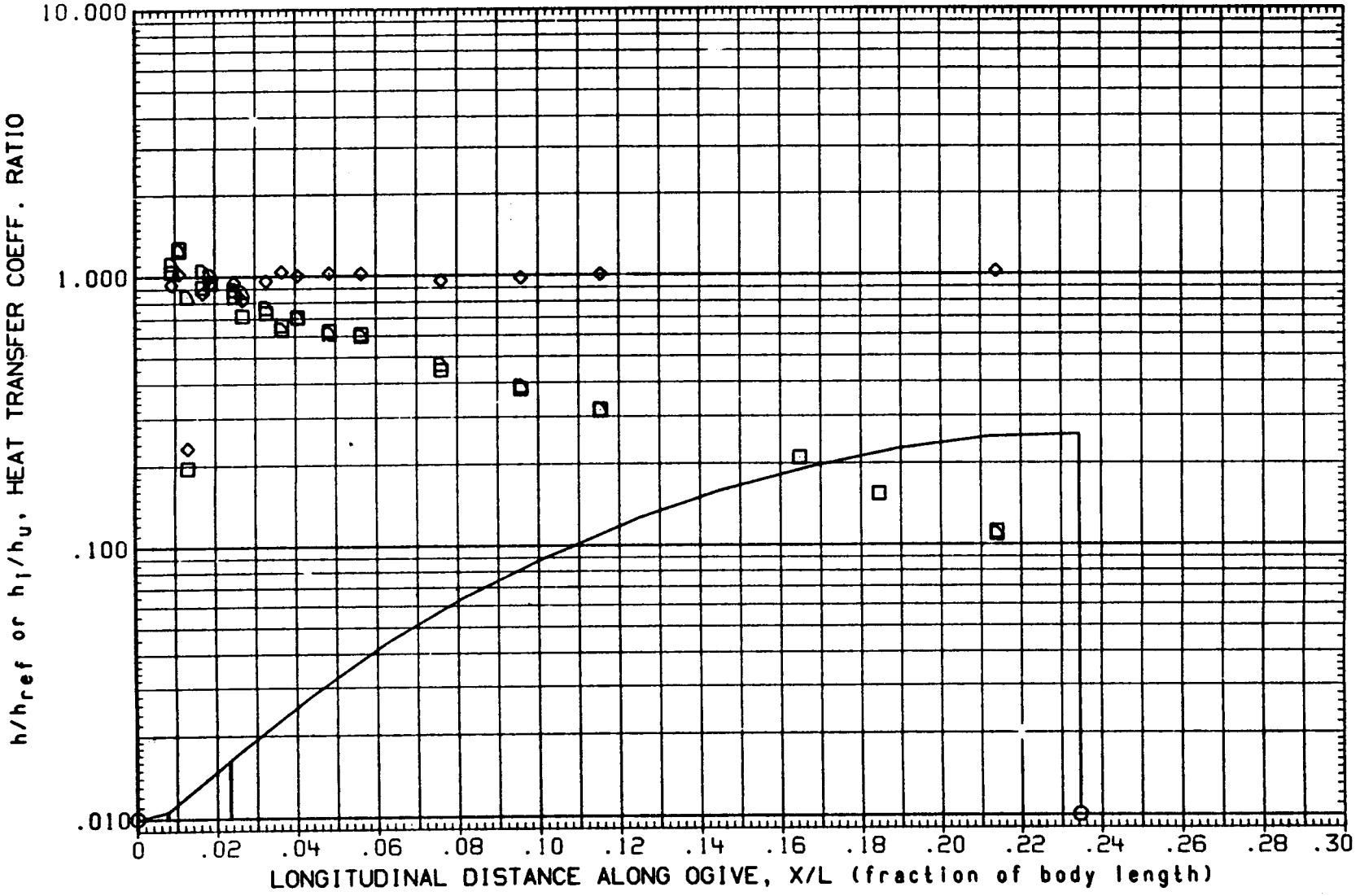


FIG. 6. LONG. DISTRIBUTION OF HEATING RATE ON ET OGIVE - MACH= 5.3
ALPHA= -5, BETA= -6 , RN/FT= 5.0

MACH = 5.300 ALPHA = -5.000 THETA = .000 DATE 26 JUN 78 PAGE 1

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	THETA	X/L
(N3AC01)	○	ARC 3.5-237 FHIS (W.W TEST)	HI/HU	-5.000	.000	.009
(03AC01)	□	ARC 3.5-237 FHIS (W.W TEST)	HI/HU	.000	.000	.009
(P3A001)	◇	ARC 3.5-237 FHIS (W.W TEST)	HI/HU	5.000	.000	.009

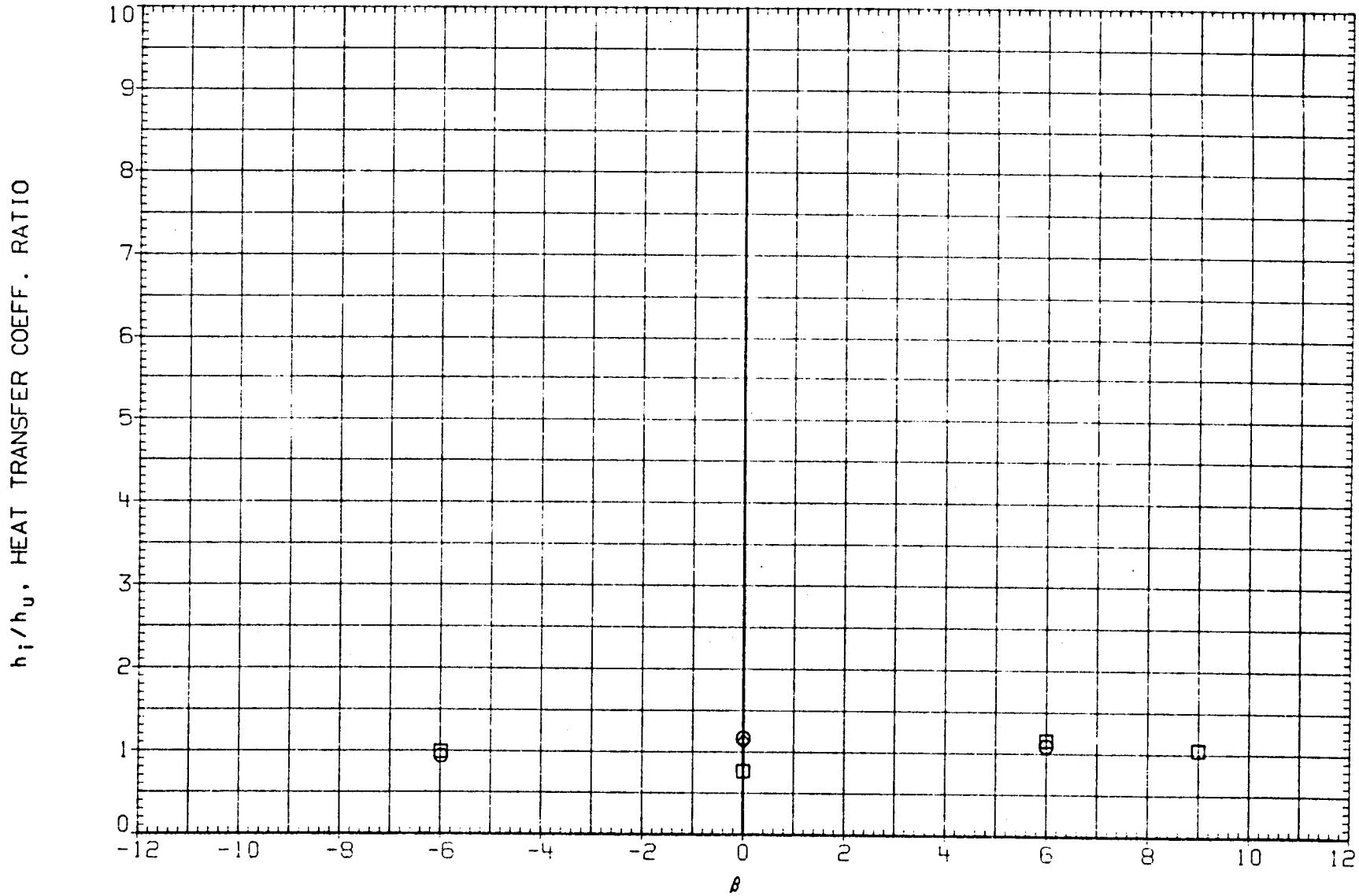


FIG. 7. EFFECT OF BETA ON ET OGIVE HEATING RATE - MACH= 5.3
THERMOCOUPLE NUMBER 001

MACH = 5.300 RN/FT = 5.000 T/C NO = 1.000 DATE 11 JUL 78 PAGE 1

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/FT
(S3A114)	○	FH16 EXTERNAL TANK OGIVE PROFILE				
(S3A103)	□	FH16. ARC 3.5-237. ET NOSE (CLEAN)	HU/HREF	-5.000	-6.000	5.000
(S3A105)	△	FH16. ARC 3.5-237. ET NOSE (CLEAN)	HU/HREF	-5.000	.000	5.000
(S3A107)	◇	FH16. ARC 3.5-237. ET NOSE (CLEAN)	HU/HREF	-5.000	6.000	5.000

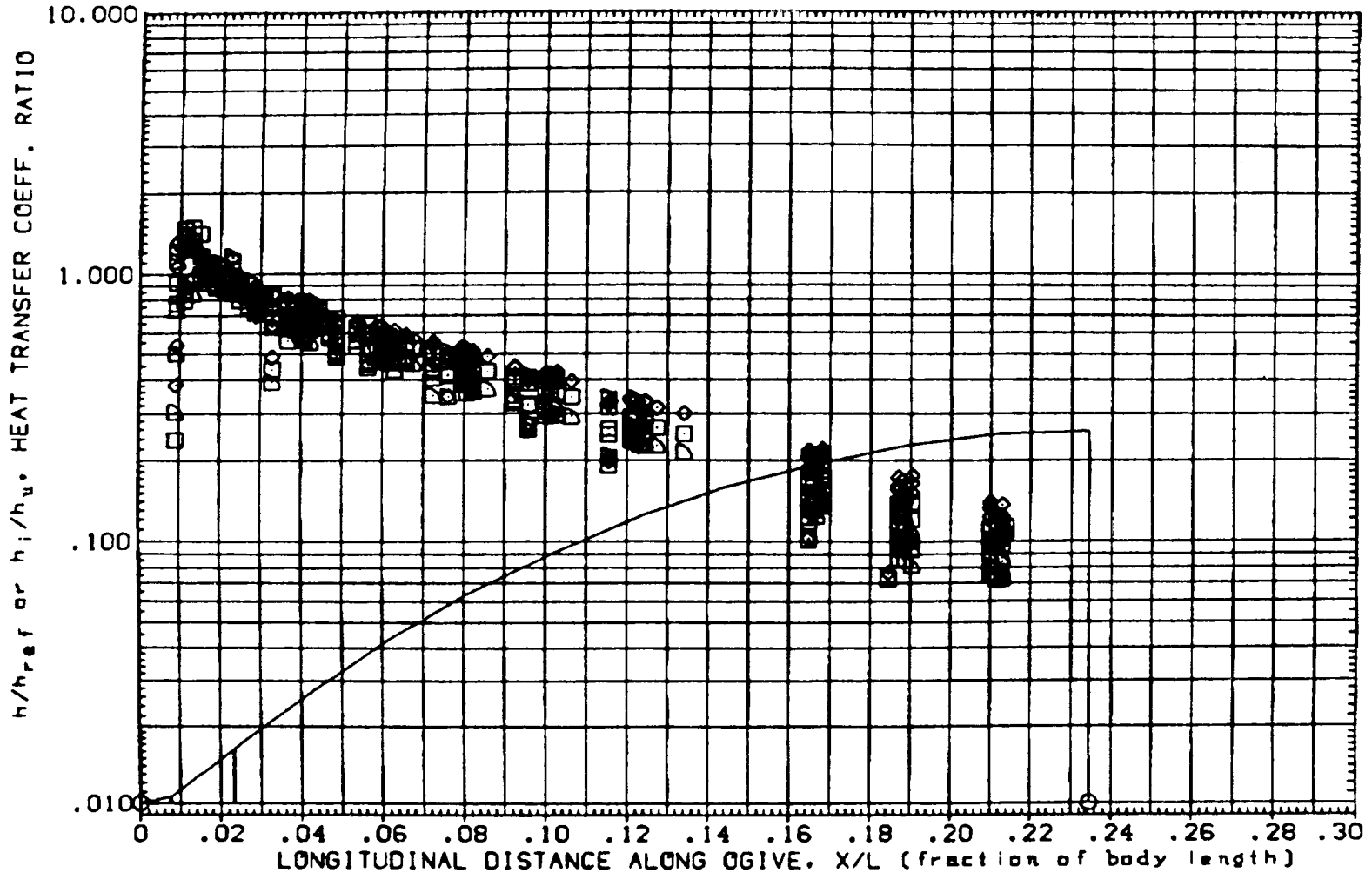


FIG. 8A. LONG. DISTRIBUTION OF HEATING RATE ON ET OGIVE - MACH= 5.3
ALPHA= -5. BETA= -6 , 0, 6 , RN/FT= 5.0

MACH = 5.300 ALPHA = -5.000 THETA = 360.000 PAGE 9

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/FT
(03A114)	○	FH16 EXTERNAL TANK OGIVE PROFILE				
(S3A003)	□	FH16. ARC 3.5-237. ET NOSE (W/PROTUB.)	HI/HREF	-5.000	-6.000	5.000
(S3A005)	△	FH16. ARC 3.5-237. ET NOSE (W/PROTUB.)	HI/HREF	-5.000	.000	5.000
(S3A007)	◇	FH16. ARC 3.5-237. ET NOSE (W/PROTUB.)	HI/HREF	-5.000	6.000	5.000

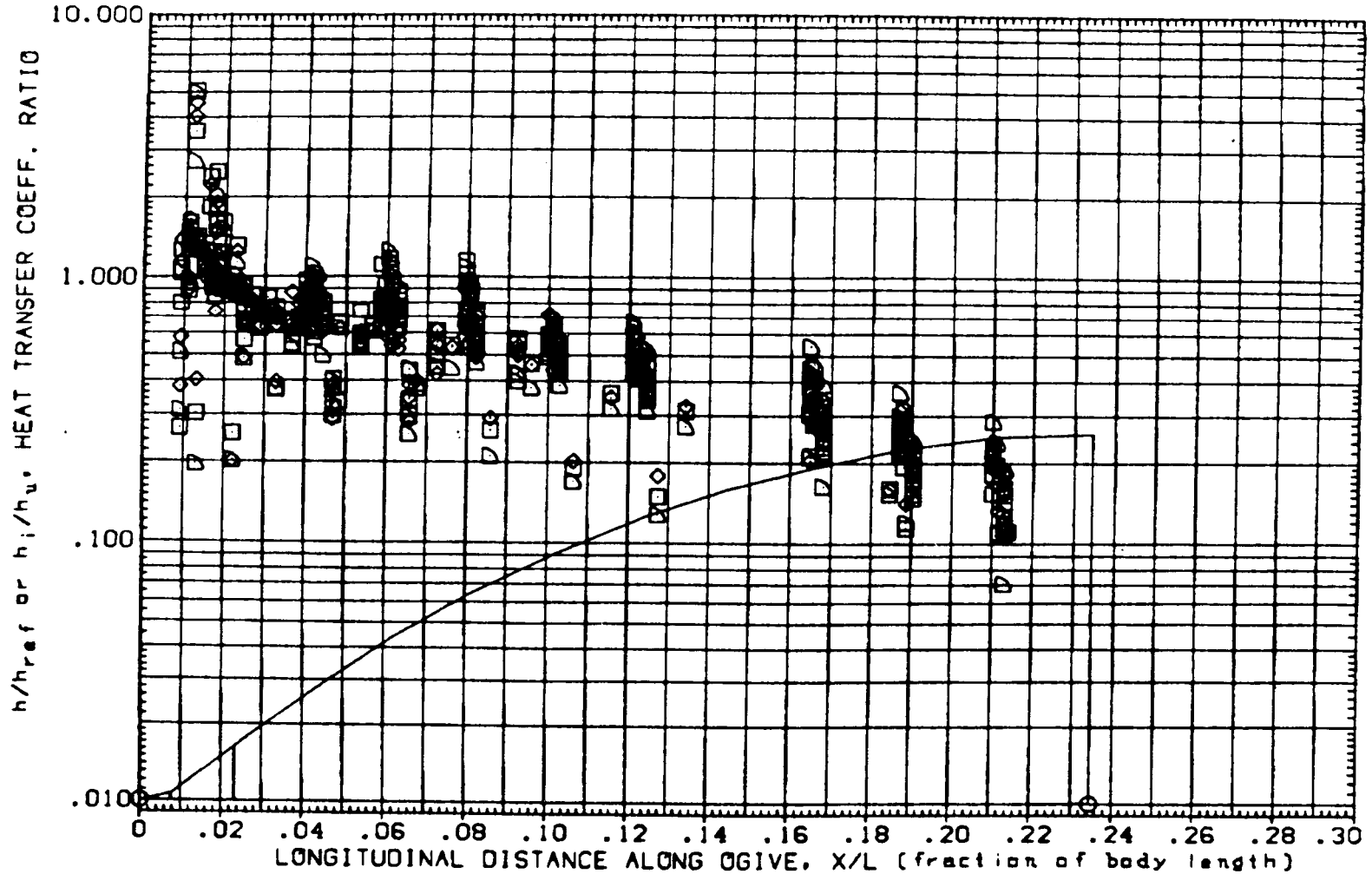


FIG. 8B. LONG. DISTRIBUTION OF HEATING RATE ON ET OGIVE - MACH= 5.3
ALPHA= -5, BETA= -6, 0, 6, RN/FT= 5.0

MACH = 5.300 ALPHA = -5.000 THETA = 360.000 PAGE 12

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION		ALPHA	BETA	RN/FT
(03A114)	○	FH16 EXTERNAL TANK OGIVE PROFILE				
(S3AR03)	□	FH16 (W/W TEST) S3A003/S3A103	HI/HU	-5.000	-6.000	5.000
(S3AR05)	△	FH16 (W/W TEST) S3A005/S3A105	HI/HU	-5.000	.000	5.000
(S3AR07)	◇	FH16 (W/W TEST) S3A007/S3A107	HI/HU	-5.000	6.000	5.000

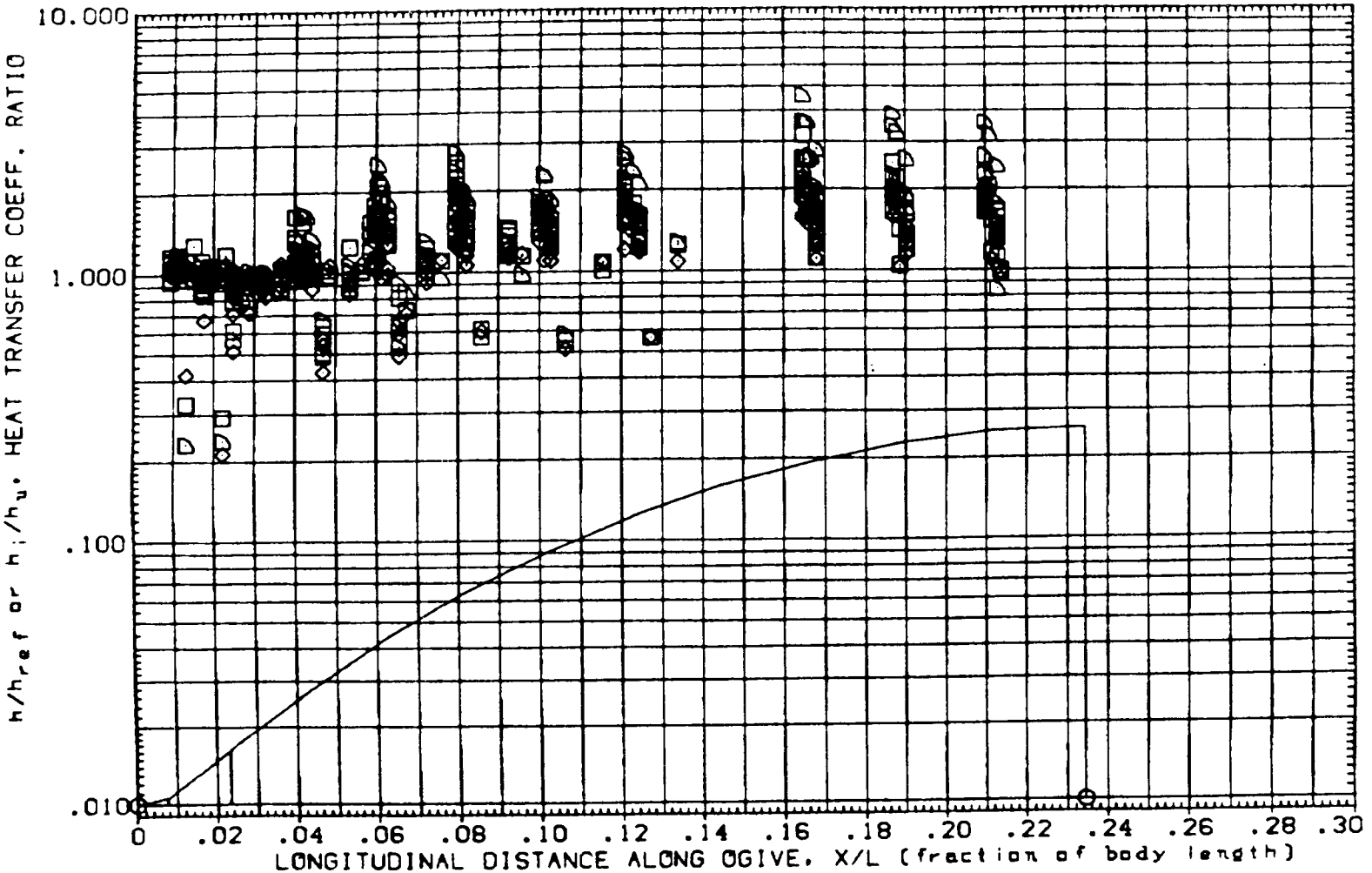


FIG. 8C LONG. DISTRIBUTION OF HEATING RATE ON ET OGIVE - MACH= 5.3
ALPHA= -5, BETA= -6, 0, 6, RN/FT= 5.0

MACH = 5.300 ALPHA = -5.000 THETA = 360.000 PAGE 15

APPENDIX

TABULATED SOURCE DATA

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A003)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = -5.000 BETA = -6.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
20	-5.000	-6.000	5.300	.4798+07	404.2	1332.	325.9	.5322	205.2	.2176-03	3721.	.2750-01
21	-5.000	-6.000	5.300	.4860+07	407.0	1327.	324.6	.5360	204.4	.2201-03	3714.	.2750-01
22	-5.000	-6.000	5.300	.4789+07	406.5	1339.	327.5	.5351	206.3	.2177-03	3731.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
20	.0000	.2576
21	.0000	.2584
22	.0000	.2585

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
20	.00000	.91000-02	1.0000	.8522	1.036	1.161	47.28	40.30	.4355	591.4	.1022-01
20	.00000	.11100-01	2.0000	1.043	1.266	1.418	47.52	49.57	.4328	587.8	.1250-01
20	.00000	.13100-01	3.0000	.1606	.1945	.2175	48.07	7.719	.4265	579.2	.1920-02
20	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	.00000	.17000-01	5.0000	.7509	.9095	1.017	48.06	36.09	.4265	579.3	.8978-02
20	.00000	.19000-01	6.0000	.7810	.9455	1.057	48.16	37.61	.4254	577.7	.9334-02
20	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	.00000	.24900-01	9.0000	.6967	.8426	.9412	48.39	33.71	.4227	574.0	.8319-02
20	.00000	.26900-01	10.000	.5901	.7138	.7973	48.39	28.55	.4228	574.1	.7047-02
20	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	.00000	.32800-01	12.000	.6074	.7309	.8137	50.05	30.40	.4083	557.4	.7224-02
22	.00000	.36700-01	13.000	.5467	.6577	.7321	50.13	27.41	.4074	556.2	.6501-02
22	.00000	.40600-01	14.000	.5860	.7052	.7850	50.07	29.34	.4082	557.2	.6970-02
22	.00000	.48500-01	15.000	.5192	.6247	.6953	50.12	26.02	.4076	556.4	.6174-02
22	.00000	.56400-01	16.000	.5049	.6076	.6763	50.06	25.28	.4082	557.2	.6005-02
22	.00000	.76100-01	17.000	.3701	.4454	.4959	50.01	18.51	.4088	558.0	.4403-02
22	.00000	.95800-01	18.000	.3135	.3774	.4202	49.96	15.66	.4094	558.9	.3730-02
22	.00000	.11550	19.000	.2620	.3157	.3518	49.69	13.02	.4124	563.0	.3120-02

(R3A003)

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
22	.00000	.16480	20.000	.1740	.2097	.2337	49.65	8.639	.4129	563.7	.2072-02
22	.00000	.18450	21.000	.1273	.1534	.1708	49.83	6.345	.4109	560.9	.1516-02
22	.00000	.21400	22.000	.9239-01	.1112	.1239	49.92	4.612	.4099	559.5	.1099-02
21	2.0000	.24700-01	165.00	.5661	.6811	.7581	49.66	28.11	.4078	551.6	.6690-02
21	9.0000	.15000-01	157.00	.8862	1.067	1.187	49.57	43.93	.4088	553.0	.1048-01
21	9.0000	.17600-01	158.00	.7071	.8508	.9471	49.62	35.08	.4082	552.2	.8358-02
21	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	9.8000	.24700-01	164.00	.5473	.6585	.7330	49.65	27.18	.4078	551.6	.6469-02
20	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	10.000	.30800-01	92.000	.5951	.7203	.8049	48.24	28.71	.4245	576.4	.7111-02
20	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	12.000	.12100-01	151.00	4.122	4.983	5.565	48.47	199.8	.4215	570.1	.4892-01
21	12.000	.17600-01	152.00	1.690	2.047	2.288	48.09	81.29	.4258	576.0	.2009-01
21	13.000	.19400-01	153.00	1.243	1.506	1.684	47.97	59.61	.4272	577.9	.1477-01
21	14.600	.44200-01	169.00	.6021	.7241	.8058	49.75	29.95	.4066	550.1	.7114-02
20	18.500	.44200-01	106.00	.6416	.7760	.8669	48.37	31.03	.4229	574.3	.7662-02
21	19.600	.62900-01	175.00	.5736	.6896	.7673	49.83	28.58	.4057	548.8	.6776-02
20	19.800	.40800-01	101.00	.6849	.8288	.9261	48.28	33.07	.4239	575.7	.8182-02
20	20.000	.24900-01	89.000	.3987	.4828	.5397	48.13	19.19	.4257	578.1	.4765-02
20	20.000	.28800-01	91.000	.5129	.6210	.6942	48.13	24.69	.4257	578.1	.6130-02
20	20.000	.32800-01	93.000	.5665	.6859	.7667	48.14	27.27	.4256	578.0	.6771-02
21	21.800	.82200-01	182.00	.4440	.5337	.5937	49.88	22.14	.4052	548.1	.5244-02
20	22.200	.62900-01	125.00	.6242	.7543	.8421	48.59	30.33	.4204	571.0	.7448-02
20	22.400	.44200-01	107.00	.6941	.8396	.9379	48.36	33.57	.4230	574.5	.8289-02
21	22.600	.10270	192.00	.3194	.3840	.4272	49.83	15.91	.4058	548.9	.3773-02
20	23.000	.42000-01	105.00	.8253	.9986	1.116	48.30	39.86	.4238	575.5	.9858-02
20	23.400	.59600-01	120.00	.7637	.9230	1.031	48.55	37.08	.4208	571.5	.9114-02
22	23.900	.21310	250.00	.5860-01	.7052-01	.7849-01	50.07	2.934	.4081	557.1	.6970-03
20	24.100	.82200-01	139.00	.5565	.6723	.7504	48.68	27.09	.4194	569.6	.6639-02
21	24.400	.12440	207.00	.2566	.3087	.3436	49.67	12.74	.4076	551.4	.3033-02
22	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	24.800	.16810	223.00	.1355	.1631	.1816	49.99	6.774	.4090	558.3	.1612-02
20	24.900	.62900-01	126.00	.7589	.9171	1.024	48.58	36.87	.4205	571.0	.9056-02
21	25.000	.79500-01	178.00	.4627	.5563	.6189	49.83	23.05	.4058	548.9	.5465-02
21	25.300	.10000+00	186.00	.4559	.5481	.6097	49.88	22.74	.4052	548.1	.5385-02
21	25.300	.10270	191.00	.4293	.5160	.5740	49.88	21.41	.4051	548.0	.5070-02
20	25.500	.60700-01	124.00	.9472	1.145	1.278	48.53	45.97	.4211	571.9	.1131-01
21	26.000	.12440	206.00	.3469	.4173	.4645	49.70	17.24	.4072	550.8	.4100-02
20	26.300	.82200-01	140.00	.5906	.7133	.7961	48.72	28.77	.4189	568.9	.7044-02
21	26.700	.12100	199.00	.5404	.6497	.7229	49.82	26.92	.4059	549.1	.6383-02
22	26.800	.16810	222.00	.2264	.2725	.3033	50.07	11.34	.4082	557.2	.2693-02
22	27.000	.19040	237.00	.1697	.2041	.2271	50.21	8.520	.4065	554.9	.2017-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A003)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
22	27.100	.21310	249.00	.9835-01	.1183	.1316	50.21	4.939	.4065	554.9	.1169-02
21	27.200	.80300-01	180.00	.7022	.8440	.9389	49.89	35.03	.4050	547.9	.8293-02
21	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	27.400	.40100-01	98.000	.7918	.9581	1.071	48.30	38.24	.4238	575.5	.9459-02
21	27.400	.16480	215.00	.2740	.3294	.3665	49.82	13.65	.4059	549.1	.3236-02
20	27.600	.41600-01	102.00	.9017	1.091	1.219	48.29	43.55	.4238	575.6	.1077-01
21	27.600	.12440	205.00	.4354	.5237	.5828	49.75	21.66	.4066	550.1	.5145-02
22	27.600	.18700	230.00	.1942	.2336	.2599	50.22	9.753	.4065	554.9	.2309-02
22	27.700	.21010	243.00	.1666	.2004	.2230	50.17	8.359	.4070	555.6	.1981-02
21	27.900	.10110	188.00	.5834	.7013	.7801	49.89	29.11	.4050	547.9	.6890-02
20	28.000	.46800-01	110.00	.3287	.3977	.4444	48.30	15.88	.4238	575.5	.3926-02
22	28.200	.16810	221.00	.3226	.3881	.4319	50.12	16.17	.4075	556.3	.3836-02
21	28.300	.12200	201.00	.3611	.4343	.4833	49.77	17.37	.4064	549.8	.4267-02
22	28.300	.19040	236.00	.2006	.2412	.2684	50.27	10.09	.4058	553.9	.2385-02
20	28.400	.53500-01	114.00	.4906	.5933	.6627	48.40	23.75	.4226	573.8	.5858-02
22	28.400	.21310	248.00	.1564	.1880	.2092	50.29	7.865	.4056	553.7	.1859-02
20	28.700	.58600-01	117.00	.9102	1.101	1.229	48.46	44.11	.4219	572.9	.1087-01
20	28.800	.60400-01	121.00	1.033	1.249	1.395	48.55	50.17	.4208	571.5	.1233-01
21	28.800	.16580	217.00	.3869	.4652	.5175	49.84	19.28	.4056	548.7	.4570-02
22	28.900	.18800	232.00	.2662	.3201	.3562	50.23	13.37	.4063	554.6	.3164-02
20	29.000	.65700-01	129.00	.3654	.4417	.4932	48.54	17.74	.4210	571.8	.4362-02
22	29.000	.21110	244.00	.1971	.2370	.2637	50.23	9.901	.4063	554.6	.2343-02
20	29.200	.72400-01	133.00	.4143	.5008	.5591	48.57	20.12	.4206	571.3	.4945-02
20	29.300	.79500-01	136.00	.8930	1.079	1.204	48.68	43.47	.4194	569.6	.1065-01
20	29.600	.92500-01	143.00	.3294	.3979	.4441	48.67	16.03	.4194	569.6	.3929-02
21	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	29.900	.12100	198.00	.5593	.6725	.7482	49.84	27.88	.4056	548.7	.6607-02
21	30.200	.16480	214.00	.4487	.5395	.6002	49.84	22.36	.4057	548.8	.5301-02
22	30.200	.18700	229.00	.3021	.3632	.4041	50.29	15.19	.4056	553.7	.3590-02
22	30.300	.21010	242.00	.2368	.2847	.3168	50.25	11.90	.4060	554.2	.2815-02
20	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	31.500	.11100-01	83.000	1.133	1.377	1.543	47.36	53.67	.4347	590.3	.1358-01
20	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	31.500	.16000-01	85.000	1.489	1.816	2.041	46.40	69.07	.4457	605.3	.1791-01
20	31.500	.17600-01	86.000	1.015	1.240	1.394	46.14	46.81	.4488	609.5	.1222-01
20	31.500	.19400-01	87.000	.7277	.8895	1.001	46.00	33.47	.4504	611.6	.8768-02
22	32.100	.21010	241.00	.1655	.1990	.2215	50.18	8.303	.4068	555.4	.1967-02
21	32.200	.16480	213.00	.3637	.4373	.4865	49.82	18.12	.4059	549.1	.4296-02
22	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	32.200	.18700	228.00	.1780	.2141	.2383	50.14	8.925	.4073	556.1	.2117-02
21	32.300	.12100	197.00	.4518	.5434	.6047	49.74	22.47	.4067	550.2	.5338-02
21	32.300	.12300	194.00	.4426	.5324	.5925	49.71	22.00	.4071	550.6	.5230-02
21	32.300	.12730	208.00	.1055	.1269	.1412	49.74	5.247	.4067	550.2	.1246-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A003)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
21	32.300	.13420	209.00	.2253	.2709	.3014	49.82	11.22	.4059	549.1	.2661-02
21	32.400	.10000•00	147.00	.4808	.5781	.6432	49.82	23.95	.4059	549.0	.5680-02
21	32.400	.10110	184.00	.5720	.6879	.7653	49.80	28.49	.4061	549.4	.6758-02
21	32.400	.10630	193.00	.1408	.1693	.1884	49.83	7.016	.4058	548.9	.1663-02
21	32.500	.85800-01	183.00	.1742	.2094	.2330	49.80	8.673	.4061	549.3	.2057-02
20	32.500	.92500-01	144.00	.3546	.4284	.4782	48.65	17.25	.4197	570.0	.4230-02
20	32.600	.79500-01	137.00	.7659	.9256	1.033	48.58	37.21	.4205	571.0	.9139-02
21	32.600	.80800-01	176.00	.6527	.7848	.8731	49.82	32.51	.4059	549.1	.7710-02
20	32.700	.67400-01	132.00	.3192	.3861	.4312	48.42	15.46	.4224	573.6	.3812-02
20	32.700	.72400-01	134.00	.4089	.4943	.5520	48.50	19.83	.4215	572.4	.4881-02
20	32.800	.65700-01	130.00	.2089	.2526	.2820	48.50	10.13	.4215	572.4	.2494-02
21	32.800	.16680	210.00	.2701	.3246	.3611	49.89	13.47	.4050	547.9	.3189-02
22	32.800	.18880	225.00	.9930-01	.1194	.1329	50.26	4.930	.4060	554.2	.1180-02
22	32.800	.21170	239.00	.9069-01	.1091	.1214	50.14	4.547	.4073	556.0	.1078-02
20	32.900	.58600-01	116.00	.6735	.8145	.9098	48.40	32.60	.4226	573.8	.8042-02
20	32.900	.60400-01	122.00	.6220	.7520	.8397	48.51	30.18	.4213	572.2	.7425-02
21	32.900	.61300-01	171.00	.8294	.9969	1.109	49.90	41.39	.4050	547.8	.9795-02
20	33.000	.53500-01	115.00	.4604	.5568	.6220	48.39	22.28	.4227	574.1	.5497-02
20	33.200	.46800-01	111.00	.2442	.2956	.3303	48.24	11.78	.4244	576.4	.2918-02
20	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	33.400	.42800-01	166.00	.8458	1.017	1.132	49.74	42.07	.4068	550.3	.9994-02
20	33.500	.40100-01	99.000	.7072	.8559	.9564	48.26	34.13	.4242	576.1	.8449-02
20	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	33.600	.38300-01	97.000	.5600	.6780	.7579	48.15	26.97	.4255	577.8	.6693-02
20	33.700	.36700-01	96.000	.4835	.5854	.6544	48.13	23.27	.4257	578.2	.5779-02
20	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	34.700	.18700	227.00	.2461	.2960	.3294	50.16	12.34	.4071	555.8	.2926-02
22	34.700	.21010	240.00	.1278	.1539	.1713	49.93	6.381	.4097	559.3	.1521-02
21	34.900	.16480	212.00	.2570	.3091	.3439	49.75	12.78	.4067	550.1	.3036-02
21	35.100	.10000+00	148.00	.4087	.4915	.5469	49.77	20.34	.4064	549.8	.4829-02
21	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	35.300	.22100-01	160.00	.1669	.2007	.2234	49.74	8.301	.4068	550.2	.1972-02
20	35.300	.92500-01	145.00	.3485	.4210	.4699	48.66	16.96	.4196	569.9	.4157-02
22	35.400	.18800	231.00	.1602	.1928	.2145	50.13	8.032	.4074	556.2	.1905-02
21	35.500	.12100	196.00	.3727	.4483	.4990	49.67	18.51	.4075	551.3	.4404-02
21	35.600	.16580	216.00	.2314	.2783	.3097	49.74	11.51	.4068	550.2	.2734-02
20	35.800	.80600-01	138.00	.4401	.5319	.5938	48.57	21.37	.4206	571.3	.5252-02
22	35.900	.21310	247.00	.9463-01	.1127	.1254	50.08	4.689	.4080	556.9	.1113-02
22	36.000	.19040	235.00	.1225	.1473	.1640	50.14	6.141	.4073	556.0	.1456-02
20	36.200	.72400-01	135.00	.3732	.4511	.5036	48.58	18.13	.4206	571.2	.4454-02
21	36.200	.16810	220.00	.1983	.2385	.2655	49.74	9.865	.4068	550.2	.2343-02
21	36.300	.12200	200.00	.3388	.4077	.4537	49.67	16.83	.4076	551.4	.4005-02
20	36.600	.65700-01	131.00	.2416	.2922	.3265	48.37	11.69	.4229	574.4	.2885-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A003)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
22	36.700	.18700	226.00	.1812	.2180	.2427	50.07	9.072	.4081	557.1	.2155-02
21	36.900	.10110	187.00	.4434	.5333	.5934	49.77	22.07	.4065	549.8	.5239-02
21	36.900	.16480	211.00	.2505	.3013	.3353	49.73	12.46	.4069	550.4	.2960-02
20	37.000	.60400-01	123.00	.6038	.7301	.8154	48.47	29.27	.4218	572.8	.7209-02
21	37.000	.12440	204.00	.2810	.3381	.3763	49.65	13.95	.4078	551.6	.3321-02
20	37.100	.58600-01	119.00	.5117	.6190	.6916	48.33	24.73	.4234	575.0	.6111-02
22	37.200	.21310	246.00	.1065	.1281	.1426	50.05	5.328	.4083	557.4	.1266-02
22	37.300	.19040	234.00	.1406	.1691	.1883	50.06	7.037	.4082	557.2	.1672-02
20	37.600	.53500-01	116.00	.4460	.5396	.6030	48.30	21.54	.4238	575.6	.5328-02
21	37.600	.16810	219.00	.2019	.2429	.2703	49.67	10.03	.4076	551.4	.2386-02
21	37.800	.10270	150.00	.3565	.4289	.4774	49.67	17.71	.4076	551.4	.4214-02
21	37.900	.12100	195.00	.3676	.4424	.4925	49.57	18.22	.4087	552.9	.4346-02
21	38.000	.80300-01	179.00	.5763	.6932	.7714	49.73	28.56	.4069	550.4	.6810-02
20	38.500	.46800-01	112.00	.2695	.3261	.3645	48.24	13.00	.4245	576.4	.3220-02
21	38.600	.12440	203.00	.3005	.3617	.4028	49.55	14.89	.4090	553.2	.3553-02
21	38.700	.10000+00	185.00	.4363	.5247	.5839	49.75	21.71	.4066	550.1	.5155-02
20	38.900	.82200-01	141.00	.3851	.4655	.5198	48.51	18.68	.4213	572.2	.4597-02
20	39.300	.41600-01	104.00	.5671	.6865	.7674	48.16	27.31	.4254	577.7	.6777-02
21	39.500	.10270	190.00	.4556	.5479	.6097	49.75	22.67	.4066	550.0	.5383-02
21	39.600	.16810	218.00	.1832	.2204	.2454	49.65	9.097	.4078	551.7	.2166-02
20	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	39.900	.19040	233.00	.1262	.1520	.1692	49.99	6.311	.4090	558.4	.1502-02
21	40.100	.79500-01	177.00	.6188	.7444	.8285	49.69	30.75	.4074	551.0	.7313-02
21	40.200	.12440	202.00	.2968	.3573	.3978	49.52	14.70	.4093	553.6	.3509-02
22	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	41.100	.60700-01	173.00	.5782	.6954	.7738	49.74	28.76	.4068	550.2	.6832-02
20	41.100	.82200-01	142.00	.4619	.5585	.6237	48.47	22.39	.4217	572.7	.5514-02
21	42.300	.10270	189.00	.3748	.4509	.5019	49.66	18.61	.4077	551.5	.4430-02
21	42.600	.59600-01	172.00	.5997	.7215	.8031	49.67	29.79	.4076	551.3	.7088-02
21	43.200	.42000-01	168.00	.4740	.5703	.6348	49.63	23.52	.4081	552.0	.5602-02
21	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	43.600	.62900-01	128.00	.5162	.6244	.6975	48.37	24.97	.4229	574.3	.6164-02
20	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	45.000	.22900-01	8.0000	.9245	1.121	1.255	47.78	44.18	.4297	583.6	.1106-01
21	46.100	.62900-01	174.00	.6436	.7743	.8618	49.67	31.97	.4076	551.3	.7607-02
21	47.700	.40800-01	167.00	.5148	.6195	.6896	49.59	25.53	.4085	552.6	.6085-02
20	48.400	.44200-01	109.00	.4082	.4942	.5524	48.15	19.65	.4255	577.9	.4879-02
21	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	51.000	.12100-01	154.00	2.238	2.705	3.021	48.48	108.5	.4213	569.9	.2655-01
21	51.000	.17600-01	155.00	.6893	.8342	.9322	48.22	33.24	.4243	574.0	.8187-02
21	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
21	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A003)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
21	65.200	.24700-01	162.00	.6317	.7606	.8471	49.44	31.23	.4102	554.9	.7471-02
22	90.000	.91000-02	44.000	.4227	.5103	.5693	49.25	20.82	.4175	569.9	.5041-02
22	90.000	.11100-01	45.000	.7815	.9427	1.051	49.47	38.67	.4149	566.4	.9313-02
22	90.000	.13100-01	46.000	1.165	1.404	1.564	49.69	57.88	.4125	563.1	.1387-01
22	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	90.000	.17000-01	48.000	.7712	.9290	1.035	49.79	38.40	.4113	561.4	.9180-02
22	90.000	.20900-01	50.000	.7322	.8818	.9822	49.85	36.50	.4107	560.6	.8714-02
22	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	90.000	.26900-01	53.000	.6212	.7480	.8330	49.91	31.00	.4100	559.7	.7392-02
22	90.000	.28800-01	54.000	.6018	.7246	.8069	49.92	30.04	.4099	559.5	.7161-02
22	90.000	.32800-01	55.000	.3089	.3717	.4138	50.06	15.46	.4082	557.2	.3674-02
22	90.000	.36700-01	56.000	.4413	.5311	.5914	49.99	22.06	.4090	558.4	.5249-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	135.00	.19000-01	49.000	.7683	.9244	1.029	50.08	38.47	.4080	557.0	.9137-02
22	135.00	.22900-01	51.000	.7325	.8809	.9802	50.21	36.78	.4065	554.9	.8707-02
22	180.00	.91000-02	23.000	.2558	.3089	.3448	49.12	12.56	.4190	571.9	.3051-02
22	180.00	.11100-01	24.000	.7862	.9471	1.055	49.77	39.13	.4116	561.8	.9359-02
22	180.00	.13100-01	25.000	1.073	1.291	1.437	50.07	53.71	.4082	557.2	.1276-01
22	180.00	.15000-01	26.000	1.010	1.215	1.352	50.17	50.68	.4070	555.6	.1201-01
22	180.00	.17000-01	27.000	.8107	.9746	1.084	50.29	40.77	.4056	553.7	.9634-02
22	180.00	.19000-01	28.000	.7809	.9385	1.044	50.36	39.32	.4048	552.6	.9278-02
22	180.00	.20900-01	29.000	.7512	.9027	1.004	50.44	37.89	.4039	551.4	.8924-02
22	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	180.00	.28800-01	32.000	.6041	.7256	.8068	50.53	30.53	.4028	549.9	.7174-02
22	180.00	.32800-01	33.000	.5271	.6331	.7038	50.54	26.64	.4028	549.9	.6259-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	225.00	.22900-01	30.000	.7210	.8663	.9634	50.44	36.37	.4038	551.3	.8565-02
22	270.00	.91000-02	63.000	1.042	1.257	1.401	49.57	51.66	.4138	564.9	.1242-01
22	270.00	.11100-01	64.000	1.120	1.349	1.503	49.77	55.75	.4116	561.8	.1334-01

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A003)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
22	270.00	.13100-01	65.000	1.059	1.275	1.419	50.05	53.01	.4083	557.4	.1260-01
22	270.00	.17000-01	67.000	.9101	1.094	1.217	50.32	45.79	.4053	553.2	.1081-01
22	270.00	.20900-01	69.000	.8125	.9762	1.086	50.46	41.00	.4037	551.1	.9651-02
22	270.00	.24900-01	71.000	.7852	.9434	1.049	50.47	39.64	.4035	550.8	.9327-02
22	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	315.00	.15000-01	66.000	1.029	1.238	1.379	49.99	51.43	.4090	558.4	.1224-01
22	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
22	315.00	.22900-01	70.000	.8357	1.005	1.118	50.29	42.03	.4056	553.7	.9932-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A005)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
6	-5.000	.0000	5.300	.4973+07	406.6	1308.	319.5	.5362	201.2	.2236-03	3685.	.2750-01
7	-5.000	.0000	5.300	.5093+07	405.2	1285.	313.8	.5349	197.6	.2271-03	3652.	.2750-01
27	-5.000	.0000	5.300	.4788+07	403.5	1333.	325.9	.5312	205.2	.2172-03	3722.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
6	.0000	.2581
7	.0000	.2573
27	.0000	.2574

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
7	.00000	.91000-02	1.0000	.8734	1.063	1.192	45.27	39.54	.4384	573.3	.1023-01
7	.00000	.11100-01	2.0000	1.211	1.471	1.649	45.56	55.17	.4349	568.7	.1417-01
7	.00000	.13100-01	3.0000	.2478	.3006	.3365	45.86	11.36	.4313	564.1	.2895-02
7	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	.00000	.17000-01	5.0000	1.015	1.230	1.376	46.13	46.82	.4281	559.8	.1185-01
7	.00000	.19000-01	6.0000	.9426	1.142	1.277	46.22	43.57	.4270	558.4	.1100-01
7	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	.00000	.24900-01	9.0000	.7525	.9111	1.018	46.35	34.88	.4254	556.3	.8777-02
7	.00000	.26900-01	10.000	.6986	.8458	.9453	46.35	32.38	.4254	556.3	.8148-02
7	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	.00000	.32800-01	12.000	.6336	.7632	.8502	49.36	31.28	.4111	558.4	.7548-02
27	.00000	.36700-01	13.000	.5651	.6803	.7575	49.50	27.97	.4095	556.3	.6728-02
27	.00000	.40600-01	14.000	.6062	.7300	.8130	49.44	29.97	.4102	557.2	.7220-02
27	.00000	.48500-01	15.000	.5496	.6614	.7364	49.57	27.24	.4087	555.1	.6542-02
27	.00000	.56400-01	16.000	.5308	.6387	.7110	49.63	26.35	.4080	554.1	.6318-02
27	.00000	.76100-01	17.000	.4464	.5369	.5975	49.74	22.21	.4067	552.4	.5311-02
27	.00000	.95800-01	18.000	.3831	.4607	.5126	49.79	19.08	.4061	551.6	.4557-02
27	.00000	.11550	19.000	.2981	.3587	.3993	49.62	14.79	.4082	554.4	.3548-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A005)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
27	.00000	.16480	20.000	.1755	.2111	.2349	49.70	8.721	.4072	553.1	.2088-02
27	.00000	.18450	21.000	.1319	.1588	.1769	49.51	6.533	.4094	556.0	.1571-02
27	.00000	.21400	22.000	.9143-01	.1100	.1225	49.59	4.534	.4085	554.9	.1088-02
6	2.0000	.24700-01	165.00	.6038	.7286	.8126	48.09	29.04	.4164	554.5	.7088-02
6	9.0000	.15000-01	157.00	1.037	1.252	1.396	48.05	49.84	.4168	555.1	.1218-01
6	9.0000	.17600-01	158.00	.7875	.9500	1.059	48.16	37.93	.4156	553.4	.9243-02
6	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	9.8000	.24700-01	164.00	.6022	.7268	.8106	48.07	28.95	.4166	554.8	.7071-02
7	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	10.000	.26900-01	90.000	.6354	.7700	.8613	46.14	29.32	.4280	559.7	.7417-02
7	10.000	.30800-01	92.000	.6851	.8299	.9279	46.24	31.68	.4268	558.1	.7994-02
7	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	12.000	.12100-01	151.00	4.152	5.038	5.640	46.82	194.4	.4314	574.5	.4898-01
6	12.000	.17600-01	152.00	2.026	2.463	2.760	46.46	94.15	.4355	580.0	.2393-01
6	13.000	.19400-01	153.00	1.309	1.592	1.784	46.41	60.76	.4362	580.8	.1547-01
6	14.600	.44200-01	169.00	.6436	.7762	.8654	48.24	31.05	.4147	552.2	.7553-02
7	18.500	.44200-01	106.00	.6589	.7982	.8925	46.23	30.46	.4269	558.2	.7688-02
6	19.600	.62900-01	175.00	.5770	.6960	.7759	48.23	27.83	.4148	552.3	.6771-02
7	19.800	.40800-01	101.00	.7130	.8641	.9664	46.15	32.90	.4279	559.5	.8323-02
7	20.000	.24900-01	89.000	.4650	.5636	.6305	46.09	21.43	.4286	560.5	.5429-02
7	20.000	.28800-01	91.000	.5184	.6284	.7029	46.08	23.89	.4286	560.6	.6052-02
7	20.000	.32800-01	93.000	.6157	.7463	.8349	46.09	28.38	.4285	560.4	.7189-02
6	21.800	.82200-01	182.00	.4814	.5804	.6470	48.29	23.25	.4141	551.4	.5648-02
7	22.200	.62900-01	125.00	.6359	.7699	.8606	46.36	29.48	.4253	556.2	.7417-02
7	22.400	.44200-01	107.00	.6046	.7324	.8190	46.21	27.93	.4271	558.6	.7055-02
6	22.600	.10270	192.00	.3606	.4348	.4847	48.30	17.42	.4140	551.3	.4231-02
7	23.000	.42000-01	105.00	.7205	.8730	.9764	46.15	33.25	.4279	559.5	.8409-02
7	23.400	.59600-01	120.00	.6883	.8335	.9318	46.29	31.86	.4262	557.3	.8029-02
27	23.900	.21310	250.00	.9660-01	.1163	.1294	49.59	4.790	.4085	554.9	.1150-02
7	24.100	.82200-01	139.00	.5871	.7110	.7949	46.29	27.18	.4262	557.3	.6849-02
6	24.400	.12440	207.00	.3042	.3670	.4091	48.22	14.67	.4149	552.6	.3570-02
27	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	24.800	.16810	223.00	.1887	.2271	.2528	49.59	9.356	.4085	554.9	.2246-02
7	24.900	.62900-01	126.00	.7218	.8740	.9771	46.30	33.42	.4260	557.2	.8420-02
6	25.000	.79500-01	178.00	.5508	.6644	.7407	48.22	26.56	.4149	552.6	.6464-02
6	25.300	.10000+00	186.00	.4527	.5460	.6087	48.23	21.83	.4148	552.4	.5312-02
6	25.300	.10270	191.00	.4197	.5062	.5643	48.24	20.25	.4146	552.2	.4925-02
7	25.500	.60700-01	124.00	.8705	1.054	1.179	46.28	40.29	.4263	557.4	.1016-01
6	26.000	.12440	206.00	.3405	.4108	.4581	48.15	16.40	.4157	553.6	.3997-02
7	26.300	.82200-01	140.00	.6065	.7345	.8212	46.28	28.07	.4263	557.5	.7075-02
6	26.700	.12100	199.00	.4818	.5814	.6484	48.11	23.18	.4162	554.2	.5656-02
27	26.800	.16810	222.00	.2185	.2630	.2929	49.52	10.82	.4093	555.9	.2602-02
27	27.000	.19040	237.00	.1802	.2170	.2418	49.31	8.883	.4117	559.2	.2146-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A005)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
27	27.100	.21310	249.00	.1311	.1578	.1757	49.50	6.488	.4095	556.3	.1561-02
6	27.200	.80300-01	180.00	.7594	.9161	1.022	48.17	36.58	.4155	553.2	.8913-02
6	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	27.400	.40100-01	98.000	.7257	.8796	.9840	46.08	33.44	.4287	560.6	.8472-02
6	27.400	.16480	215.00	.2729	.3292	.3670	48.23	13.16	.4148	552.3	.3203-02
7	27.600	.41600-01	102.00	.7561	.9167	1.026	46.06	34.83	.4289	560.9	.8829-02
6	27.600	.12440	205.00	.3733	.4503	.5022	48.15	17.97	.4157	553.5	.4381-02
27	27.600	.18700	230.00	.2100	.2530	.2819	49.28	10.35	.4120	559.7	.2502-02
27	27.700	.21010	243.00	.1783	.2149	.2394	49.24	8.779	.4126	560.4	.2125-02
6	27.900	.10110	188.00	.5258	.6343	.7073	48.17	25.33	.4155	553.3	.6172-02
7	28.000	.46800-01	110.00	.3079	.3733	.4176	46.07	14.19	.4288	560.7	.3595-02
27	28.200	.16810	221.00	.2670	.3215	.3580	49.44	13.20	.4102	557.2	.3179-02
6	28.300	.12200	201.00	.3823	.4611	.5141	48.20	18.43	.4151	552.8	.4486-02
27	28.300	.19040	236.00	.1611	.1942	.2164	49.20	7.928	.4129	560.9	.1920-02
7	28.400	.53500-01	114.00	.4480	.5429	.6072	46.15	20.68	.4279	559.5	.5230-02
27	28.400	.21310	248.00	.1325	.1596	.1778	49.31	6.532	.4117	559.3	.1578-02
7	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	28.800	.60400-01	121.00	.9561	1.158	1.295	46.21	44.18	.4271	558.6	.1116-01
6	28.800	.16580	217.00	.3339	.4028	.4491	48.19	16.09	.4152	553.0	.3919-02
27	28.900	.18800	232.00	.2232	.2691	.2999	49.20	10.98	.4129	560.9	.2661-02
7	29.000	.65700-01	129.00	.3587	.4345	.4859	46.21	16.57	.4271	558.6	.4186-02
27	29.000	.21110	244.00	.1615	.1947	.2169	49.22	7.951	.4127	560.6	.1925-02
7	29.200	.72400-01	133.00	.5037	.6104	.6827	46.15	23.25	.4278	559.4	.5880-02
7	29.300	.79500-01	136.00	.9416	1.141	1.275	46.21	43.51	.4271	558.5	.1099-01
7	29.600	.92500-01	143.00	.4530	.5490	.6140	46.13	20.90	.4280	559.7	.5288-02
6	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	29.900	.12100	198.00	.4964	.5991	.6682	48.08	23.87	.4165	554.7	.5829-02
6	30.200	.16480	214.00	.3713	.4480	.4996	48.14	17.88	.4158	553.7	.4359-02
27	30.200	.18700	229.00	.2412	.2907	.3241	49.15	11.85	.4136	561.8	.2875-02
27	30.300	.21010	242.00	.1871	.2257	.2516	49.08	9.184	.4144	562.9	.2231-02
7	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	31.500	.11100-01	83.000	1.304	1.585	1.777	45.42	59.22	.4366	570.9	.1526-01
7	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	31.500	.16000-01	85.000	1.943	2.369	2.660	44.86	87.16	.4434	579.8	.2280-01
7	31.500	.17600-01	86.000	1.330	1.622	1.822	44.70	59.43	.4453	582.3	.1561-01
7	31.500	.19400-01	87.000	1.001	1.223	1.374	44.55	44.62	.4470	584.6	.1176-01
27	32.100	.21010	241.00	.1494	.1804	.2012	48.85	7.300	.4170	566.4	.1783-02
6	32.200	.16480	213.00	.3141	.3791	.4229	48.06	15.09	.4168	555.1	.3688-02
27	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	32.200	.18700	228.00	.2010	.2426	.2706	48.85	9.817	.4170	566.5	.2398-02
6	32.300	.12100	197.00	.4308	.5202	.5804	47.97	20.66	.4179	556.5	.5060-02
6	32.300	.12300	194.00	.3874	.4678	.5220	47.94	18.57	.4182	556.8	.4551-02
6	32.300	.12730	208.00	.1226	.1481	.1652	48.00	5.887	.4175	556.0	.1440-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A005)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
6	32.300	.13420	209.00	.2553	.3080	.3435	48.15	12.29	.4157	553.6	.2997-02
6	32.400	.10000+00	147.00	.4504	.5438	.6067	47.98	21.61	.4177	556.3	.5290-02
6	32.400	.10110	184.00	.5110	.6169	.6882	47.99	24.52	.4176	556.2	.6001-02
6	32.400	.10630	193.00	.1560	.1883	.2100	48.02	7.490	.4172	555.6	.1831-02
6	32.500	.85800-01	183.00	.2162	.2611	.2912	47.99	10.38	.4175	556.0	.2540-02
7	32.500	.92500-01	144.00	.4697	.5694	.6370	46.07	21.64	.4287	560.7	.5484-02
7	32.600	.79500-01	137.00	.8331	1.010	1.130	46.08	38.39	.4287	560.6	.9727-02
6	32.600	.80800-01	176.00	.7296	.8811	.9831	47.93	34.97	.4183	557.0	.8571-02
7	32.700	.67400-01	132.00	.3063	.3713	.4154	46.07	14.11	.4287	560.7	.3577-02
7	32.700	.72400-01	134.00	.4546	.5510	.6164	46.10	20.96	.4284	560.2	.5307-02
7	32.800	.65700-01	130.00	.2431	.2947	.3297	46.09	11.20	.4286	560.5	.2838-02
6	32.800	.16680	210.00	.2344	.2829	.3156	48.07	11.27	.4167	554.9	.2752-02
27	32.800	.18880	225.00	.9433-01	.1139	.1270	48.84	4.607	.4172	566.7	.1126-02
27	32.800	.21170	239.00	.9064-01	.1094	.1221	48.78	4.421	.4179	567.6	.1082-02
7	32.900	.58600-01	118.00	.6123	.7422	.8303	46.08	28.22	.4286	560.6	.7149-02
7	32.900	.60400-01	122.00	.6035	.7315	.8183	46.10	27.82	.4285	560.3	.7046-02
6	32.900	.61400-01	171.00	.7835	.9458	1.055	48.00	37.61	.4174	555.9	.9201-02
7	33.000	.53500-01	115.00	.4775	.5788	.6475	46.08	22.00	.4286	560.6	.5575-02
7	33.200	.46800-01	111.00	.2574	.3121	.3492	46.01	11.84	.4295	561.7	.3006-02
7	33.200	.48300-01	113.00	.2733	.3313	.3707	46.05	12.58	.4291	561.1	.3191-02
6	33.400	.42800-01	166.00	.6758	.8163	.9111	47.85	32.33	.4193	558.3	.7940-02
7	33.500	.40100-01	99.000	.6517	.7904	.8845	45.96	29.95	.4301	562.4	.7612-02
7	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	33.600	.38300-01	97.000	.5736	.6957	.7787	45.93	26.34	.4305	563.0	.6701-02
7	33.700	.36700-01	96.000	.5543	.6724	.7525	45.92	25.45	.4306	563.1	.6476-02
7	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	34.700	.18700	227.00	.2053	.2478	.2764	48.83	10.02	.4172	566.7	.2450-02
27	34.700	.21010	240.00	.1492	.1802	.2011	48.70	7.266	.4187	568.7	.1781-02
6	34.900	.16480	212.00	.2496	.3013	.3361	48.00	11.98	.4175	555.9	.2931-02
6	35.100	.10000+00	148.00	.4183	.5051	.5635	47.95	20.05	.4181	556.8	.4913-02
6	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	35.300	.22100-01	160.00	.2097	.2533	.2826	47.86	10.04	.4191	558.1	.2463-02
7	35.300	.92500-01	145.00	.4506	.5462	.6111	46.06	20.75	.4289	560.9	.5261-02
27	35.400	.18800	231.00	.1859	.2243	.2503	48.85	9.079	.4170	566.4	.2218-02
6	35.500	.12100	196.00	.3957	.4778	.5332	47.92	18.96	.4184	557.2	.4648-02
6	35.600	.10680	216.00	.2290	.2765	.3085	47.99	10.99	.4175	556.0	.2690-02
7	35.800	.80600-01	138.00	.5322	.6452	.7218	46.06	24.51	.4289	560.9	.6214-02
27	35.900	.21310	247.00	.1109	.1338	.1492	48.90	5.422	.4164	565.7	.1323-02
27	36.000	.19040	235.00	.1437	.1735	.1935	48.85	7.021	.4170	566.4	.1715-02
7	36.200	.72400-01	135.00	.3689	.4470	.5000	46.13	17.02	.4281	559.8	.4306-02
6	36.200	.16810	220.00	.2005	.2420	.2700	48.01	9.626	.4173	555.7	.2354-02
6	36.300	.12200	200.00	.3609	.4359	.4864	47.92	17.30	.4184	557.2	.4240-02
7	36.600	.65700-01	131.00	.2785	.3377	.3778	46.02	12.82	.4293	561.5	.3252-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H1/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
27	36.700	.18700	226.00	.1862	.2247	.2507	48.84	9.092	.4172	566.7	.2222-02
6	36.900	.10110	187.00	.4759	.5745	.6409	48.00	22.84	.4175	556.0	.5589-02
6	36.900	.16480	211.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	37.000	.60400-01	123.00	.6863	.8317	.9302	46.13	31.66	.4280	559.7	.8011-02
6	37.000	.12440	204.00	.3071	.3709	.4139	47.93	14.72	.4183	557.1	.3608-02
7	37.100	.58600-01	119.00	.6561	.7956	.8901	46.02	30.20	.4294	561.5	.7662-02
27	37.200	.21310	246.00	.1177	.1421	.1585	48.87	5.754	.4168	566.1	.1405-02
27	37.300	.19040	234.00	.1529	.1846	.2060	48.76	7.455	.4181	567.9	.1825-02
7	37.600	.53500-01	116.00	.6054	.7341	.8213	46.03	27.87	.4293	561.4	.7070-02
6	37.600	.16810	219.00	.1966	.2373	.2648	47.98	9.431	.4177	556.3	.2309-02
6	37.800	.10270	150.00	.3813	.4605	.5138	47.92	18.27	.4184	557.2	.4479-02
6	37.900	.12100	195.00	.3521	.4252	.4745	47.90	16.87	.4186	557.5	.4136-02
6	38.000	.80300-01	179.00	.7092	.8563	.9554	47.98	34.03	.4178	556.3	.8330-02
7	38.500	.46800-01	112.00	.3311	.4016	.4493	46.00	15.23	.4297	561.9	.3867-02
6	38.600	.12440	203.00	.3055	.3690	.4117	47.91	14.64	.4186	557.4	.3589-02
6	38.700	.10000+00	185.00	.4386	.5899	.6581	47.99	23.45	.4175	556.0	.5739-02
7	38.900	.82200-01	141.00	.4604	.5582	.6245	46.06	21.21	.4289	560.9	.5376-02
7	39.300	.41600-01	104.00	.5677	.6886	.7707	45.92	26.07	.4306	563.1	.6632-02
6	39.500	.10270	190.00	.4543	.5483	.6116	48.05	21.83	.4168	555.1	.5334-02
6	39.600	.16810	218.00	.1786	.2157	.2406	47.99	8.571	.4176	556.2	.2098-02
7	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	39.900	.19040	233.00	.1326	.1601	.1787	48.73	6.461	.4184	568.3	.1583-02
6	40.100	.79500-01	177.00	.6146	.7420	.8278	47.98	29.49	.4177	556.3	.7218-02
6	40.200	.12440	202.00	.2876	.3473	.3875	47.91	13.78	.4186	557.4	.3378-02
27	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	41.100	.60700-01	173.00	.6883	.8312	.9274	47.94	33.00	.4182	556.9	.8085-02
7	41.100	.82200-01	142.00	.4748	.5756	.6439	46.05	21.86	.4290	561.0	.5544-02
6	42.300	.10270	189.00	.3652	.4409	.4919	47.98	17.52	.4177	556.3	.4289-02
6	42.600	.59600-01	172.00	.7701	.9301	1.038	47.91	36.90	.4185	557.3	.9047-02
6	43.200	.42000-01	168.00	.4954	.5986	.6682	47.78	23.67	.4201	559.4	.5822-02
6	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	43.600	.62900-01	128.00	.5236	.6348	.7103	46.04	24.11	.4291	561.2	.6114-02
7	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
7	45.000	.22900-01	8.0000	1.074	1.303	1.459	45.80	49.18	.4320	564.9	.1255-01
6	46.100	.62900-01	174.00	.6019	.7269	.8111	47.92	28.84	.4184	557.2	.7071-02
6	47.700	.40800-01	167.00	.5532	.6685	.7463	47.77	26.43	.4202	559.5	.6502-02
7	48.400	.44200-01	109.00	.5157	.6256	.7003	45.88	23.66	.4311	563.8	.6025-02
6	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	51.000	.12100-01	154.00	2.900	3.520	3.941	46.75	135.6	.4322	575.6	.3421-01
6	51.000	.17600-01	155.00	1.457	1.774	1.990	46.08	67.13	.4400	586.0	.1723-01
6	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
6	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A005)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
6	65.200	.24700-01	162.00	.6981	.8448	.9440	47.43	33.11	.4242	564.8	.8215-02
27	90.000	.91000-02	44.000	.6538	.7943	.8899	47.33	30.95	.4346	590.3	.7845-02
27	90.000	.11100-01	45.000	1.249	1.517	1.699	47.46	59.28	.4331	588.3	.1498-01
27	90.000	.13100-01	46.000	1.113	1.351	1.513	47.56	52.96	.4319	586.7	.1335-01
27	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	90.000	.17000-01	48.000	.8372	1.016	1.137	47.63	39.87	.4312	585.6	.1003-01
27	90.000	.20900-01	50.000	.7785	.9445	1.057	47.64	37.09	.4310	585.5	.9330-02
27	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	90.000	.26900-01	53.000	.6302	.7647	.8559	47.63	30.02	.4311	585.6	.7554-02
27	90.000	.28800-01	54.000	.6033	.7318	.8190	47.69	28.77	.4304	584.6	.7229-02
27	90.000	.32800-01	55.000	.3040	.3683	.4118	47.98	14.58	.4271	580.2	.3639-02
27	90.000	.36700-01	56.000	.4492	.5444	.6089	47.89	21.51	.4281	581.5	.5378-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	135.00	.19000-01	49.000	.7828	.9495	1.063	47.69	37.33	.4304	584.6	.9380-02
27	135.00	.22900-01	51.000	.7196	.8725	.9763	47.76	34.36	.4297	583.6	.8620-02
27	180.00	.91000-02	23.000	.2177	.2646	.2965	47.25	10.29	.4355	591.5	.2613-02
27	180.00	.11100-01	24.000	.7280	.8827	.9877	47.76	34.77	.4296	583.6	.8721-02
27	180.00	.13100-01	25.000	1.156	1.400	1.565	48.03	55.52	.4265	579.3	.1383-01
27	180.00	.15000-01	26.000	1.090	1.320	1.475	48.15	52.50	.4251	577.4	.1304-01
27	180.00	.17000-01	27.000	.8488	1.027	1.148	48.21	40.92	.4244	576.4	.1015-01
27	180.00	.19000-01	28.000	.7926	.9591	1.072	48.27	38.26	.4237	575.5	.9478-02
27	180.00	.20900-01	29.000	.7522	.9095	1.016	48.43	36.43	.4218	573.0	.8989-02
27	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	180.00	.28800-01	32.000	.6186	.7348	.8198	48.78	29.68	.4179	567.6	.7264-02
27	180.00	.32800-01	33.000	.5276	.6367	.7100	48.92	25.81	.4162	565.3	.6294-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	225.00	.22900-01	30.000	.7098	.8554	.9531	49.24	34.95	.4125	560.3	.8459-02
27	270.00	.91000-02	63.000	.6504	.7882	.8816	47.90	31.15	.4280	581.3	.7787-02
27	270.00	.11100-01	64.000	1.143	1.383	1.546	48.20	55.08	.4246	576.7	.1367-01

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A005)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
27	270.00	.13100-01	65.000	1.040	1.257	1.403	48.58	50.53	.4201	570.7	.1242-01
27	270.00	.17000-01	67.000	.8261	.9958	1.110	49.16	40.61	.4134	561.6	.9847-02
27	270.00	.20900-01	69.000	.7624	.9181	1.023	49.42	37.68	.4104	557.4	.9080-02
27	270.00	.24900-01	71.000	.7100	.8547	.9518	49.50	35.14	.4096	556.3	.8454-02
27	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	315.00	.15000-01	66.000	.9269	1.118	1.247	48.92	45.35	.4162	565.3	.1106-01
27	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
27	315.00	.22900-01	70.000	.7539	.9074	1.010	49.53	37.34	.4091	555.7	.8975-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A007)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = -5.000 BETA = 6.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
23	-5.000	6.000	5.300	.4945+07	405.7	1311.	320.3	.5349	201.7	.2225-03	3689.	.2750-01
24	-5.000	6.000	5.300	.4819+07	406.2	1333.	326.0	.5348	205.3	.2186-03	3722.	.2750-01
25	-5.000	6.000	5.300	.5011+07	406.3	1301.	317.7	.5358	200.1	.2247-03	3674.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
23	.0000	.2578
24	.0000	.2583
25	.0000	.2578

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
25	.00000	.91000-02	1.0000	.9398	1.140	1.276	46.62	43.81	.4302	569.6	.1105-01
25	.00000	.11100-01	2.0000	1.179	1.427	1.595	47.01	55.40	.4256	563.5	.1383-01
25	.00000	.13100-01	3.0000	.3315	.4003	.4467	47.62	15.78	.4183	553.9	.3882-02
25	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	.00000	.17000-01	5.0000	.8501	1.026	1.145	47.65	40.51	.4180	553.4	.9955-02
25	.00000	.19000-01	6.0000	.7857	.9483	1.058	47.73	37.50	.4170	552.2	.9198-02
25	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	.00000	.24900-01	9.0000	.6916	.8344	.9305	47.84	33.08	.4158	550.5	.8094-02
25	.00000	.26900-01	10.000	.6674	.8052	.8979	47.83	31.92	.4158	550.6	.7810-02
25	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	.00000	.32800-01	12.000	.5731	.6915	.7711	48.21	27.63	.4157	554.9	.6745-02
23	.00000	.36700-01	13.000	.5372	.6481	.7226	48.23	25.91	.4155	554.6	.6321-02
23	.00000	.40600-01	14.000	.5783	.6977	.7781	48.20	27.87	.4159	555.1	.6805-02
23	.00000	.48500-01	15.000	.5157	.6223	.6941	48.16	24.83	.4164	555.8	.6070-02
23	.00000	.56400-01	16.000	.5021	.6061	.6762	48.07	24.13	.4174	557.2	.5911-02
23	.00000	.76100-01	17.000	.4362	.5269	.5881	47.90	20.89	.4194	559.7	.5138-02
23	.00000	.95800-01	18.000	.3782	.4572	.5104	47.78	18.07	.4208	561.7	.4458-02
23	.00000	.11550	19.000	.2862	.3462	.3867	47.63	13.63	.4225	564.0	.3375-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H/HREF (R3A007)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
23	.00000	.16480	20.000	.1673	.2023	.2260	47.61	7.963	.4228	564.4	.1973-02
23	.00000	.18450	21.000	.1313	.1588	.1774	47.59	6.246	.4230	564.7	.1548-02
23	.00000	.21400	22.000	.8700-01	.1052	.1174	47.75	4.154	.4212	562.2	.1025-02
24	2.0000	.24700-01	165.00	.5557	.6685	.7441	49.86	27.71	.4074	553.5	.6591-02
24	9.0000	.15000-01	157.00	.8246	.9920	1.104	49.86	41.11	.4074	553.5	.9781-02
24	9.0000	.17600-01	158.00	.6088	.7320	.8144	49.99	30.43	.4059	551.4	.7217-02
24	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	9.8000	.24700-01	164.00	.5257	.6324	.7038	49.87	26.21	.4073	553.3	.6235-02
25	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	10.000	.30800-01	92.000	.5707	.6887	.7681	47.79	27.27	.4163	551.2	.6680-02
25	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	12.000	.12100-01	151.00	3.756	4.531	5.052	49.18	184.7	.4152	564.0	.4465-01
24	12.000	.17600-01	152.00	1.242	1.498	1.671	49.12	60.99	.4158	564.9	.1476-01
24	13.000	.19400-01	153.00	1.019	1.229	1.371	49.17	50.12	.4153	564.2	.1212-01
24	14.600	.44200-01	160.00	.5236	.6299	.7012	49.83	26.09	.4078	553.9	.6211-02
25	18.500	.44200-01	106.00	.5464	.6594	.7356	47.74	26.08	.4169	552.0	.6396-02
24	19.600	.62900-01	175.00	.4321	.5204	.5795	49.60	21.43	.4103	557.5	.5130-02
25	19.800	.40800-01	101.00	.6305	.7611	.8491	47.71	30.08	.4173	552.5	.7382-02
25	20.000	.24900-01	89.000	.4005	.4835	.5395	47.66	19.09	.4178	553.2	.4689-02
25	20.000	.28800-01	91.000	.5242	.6327	.7057	47.77	25.04	.4166	551.6	.6136-02
25	20.000	.32800-01	93.000	.6037	.7287	.8129	47.72	28.81	.4171	552.2	.7068-02
24	21.800	.82200-01	182.00	.4185	.5041	.5615	49.56	20.74	.4109	558.2	.4969-02
25	22.200	.62900-01	125.00	.4618	.5573	.6216	47.76	22.06	.4166	551.6	.5406-02
25	22.400	.44200-01	107.00	.4984	.6015	.6709	47.76	23.81	.4166	551.6	.5834-02
24	22.600	.10270	192.00	.3509	.4228	.4711	49.46	17.36	.4120	559.7	.4168-02
25	23.000	.42000-01	105.00	.5871	.7087	.7905	47.73	28.02	.4171	552.2	.6873-02
25	23.400	.59600-01	120.00	.5162	.6230	.6948	47.76	24.66	.4166	551.6	.6042-02
23	23.900	.21310	250.00	.1293	.1561	.1742	47.99	6.204	.4184	558.4	.1523-02
25	24.100	.82200-01	139.00	.4582	.5533	.6175	47.61	21.82	.4184	554.0	.5366-02
24	24.400	.12440	207.00	.3205	.3866	.4311	49.18	15.77	.4152	564.0	.3810-02
23	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	24.800	.16810	223.00	.2145	.2591	.2892	47.90	10.28	.4194	559.7	.2527-02
25	24.900	.62900-01	126.00	.4934	.5955	.6641	47.78	23.57	.4165	551.5	.5775-02
24	25.000	.79500-01	178.00	.5154	.6206	.6912	49.61	25.56	.4103	557.4	.6118-02
24	25.300	.10000+00	186.00	.4311	.5195	.5787	49.48	21.33	.4118	559.4	.5120-02
24	25.300	.10270	191.00	.3624	.4366	.4865	49.47	17.93	.4118	559.5	.4304-02
25	25.500	.60700-01	124.00	.5431	.6554	.7309	47.79	25.95	.4163	551.2	.6357-02
24	26.000	.12440	206.00	.3275	.3950	.4403	49.24	16.12	.4146	563.2	.3892-02
25	26.300	.82200-01	140.00	.4033	.4870	.5434	47.63	19.21	.4182	553.7	.4723-02
24	26.700	.12100	199.00	.4111	.4956	.5523	49.35	20.29	.4133	561.5	.4885-02
23	26.800	.16810	222.00	.2456	.2966	.3310	47.94	11.77	.4189	559.2	.2892-02
23	27.000	.19040	237.00	.1931	.2332	.2603	47.96	9.261	.4187	558.9	.2274-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A007)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
23	27.100	.21310	249.00	.1397	.1686	.1881	48.07	6.713	.4174	557.1	.1644-02
24	27.200	.80300-01	180.00	.5343	.6434	.7165	49.62	26.51	.4101	557.2	.6342-02
24	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	27.400	.40100-01	98.000	.6474	.7814	.8716	47.73	30.90	.4170	552.1	.7579-02
24	27.400	.16480	215.00	.2716	.3275	.3651	49.24	13.37	.4145	563.1	.3228-02
25	27.600	.41600-01	102.00	.6464	.7803	.8705	47.71	30.84	.4173	552.5	.7568-02
24	27.600	.12440	205.00	.3188	.3843	.4284	49.29	15.71	.4139	562.4	.3788-02
23	27.600	.18700	230.00	.2277	.2750	.3068	47.98	10.93	.4184	558.5	.2682-02
23	27.700	.21010	243.00	.1843	.2226	.2484	48.00	8.847	.4182	558.3	.2171-02
24	27.900	.10110	188.00	.3636	.4380	.4879	49.53	18.01	.4112	558.6	.4317-02
25	28.000	.46800-01	110.00	.3015	.3639	.4059	47.75	14.40	.4168	551.9	.3530-02
23	28.200	.16810	221.00	.2811	.3394	.3788	47.99	13.49	.4183	558.4	.3310-02
24	28.300	.12200	201.00	.3901	.4703	.5242	49.33	19.24	.4135	561.8	.4635-02
23	28.300	.19040	236.00	.1534	.1853	.2067	47.99	7.362	.4183	558.4	.1807-02
25	28.400	.53500-01	114.00	.4795	.5786	.6454	47.78	22.91	.4164	551.4	.5612-02
23	28.400	.21310	248.00	.1265	.1527	.1703	48.13	6.090	.4167	556.2	.1490-02
25	28.700	.58600-01	117.00	.5771	.6964	.7767	47.77	27.57	.4165	551.5	.6755-02
25	28.800	.60400-01	121.00	.5598	.6755	.7534	47.79	26.75	.4164	551.3	.6552-02
24	28.800	.16580	217.00	.3297	.3975	.4431	49.30	16.25	.4138	562.2	.3918-02
23	28.900	.18800	232.00	.2190	.2644	.2951	48.00	10.51	.4182	558.3	.2579-02
25	29.000	.65700-01	129.00	.2833	.3419	.3813	47.80	13.54	.4162	551.0	.3316-02
23	29.000	.21110	244.00	.1555	.1877	.2093	48.08	7.474	.4173	557.0	.1830-02
25	29.200	.72400-01	133.00	.5080	.6133	.6842	47.69	24.23	.4174	552.7	.5948-02
25	29.300	.79500-01	136.00	.5143	.6209	.6927	47.69	24.53	.4175	552.8	.6022-02
25	29.600	.92500-01	143.00	.4119	.4974	.5550	47.62	19.61	.4183	553.9	.4824-02
24	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	29.900	.12100	198.00	.4464	.5379	.5994	49.42	22.06	.4125	560.4	.5302-02
24	30.200	.16480	214.00	.3337	.4024	.4485	49.32	16.46	.4136	561.9	.3966-02
23	30.200	.18700	229.00	.2268	.2738	.3055	48.05	10.90	.4176	557.4	.2670-02
23	30.300	.21010	242.00	.1822	.2199	.2453	48.10	8.764	.4171	556.7	.2145-02
25	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	31.500	.11100-01	83.000	1.349	1.634	1.827	46.89	63.26	.4269	565.3	.1584-01
25	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	31.500	.16000-01	85.000	1.813	2.196	2.456	46.91	85.06	.4268	565.1	.2129-01
25	31.500	.17600-01	86.000	1.204	1.459	1.631	46.88	56.45	.4271	565.5	.1414-01
25	31.500	.19400-01	87.000	.9335	1.131	1.265	46.83	43.72	.4277	566.3	.1096-01
23	32.100	.21010	241.00	.1649	.1990	.2220	48.12	7.934	.4168	556.3	.1941-02
24	32.200	.16480	213.00	.2860	.3447	.3842	49.33	14.11	.4134	561.7	.3398-02
23	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	32.200	.18700	228.00	.2589	.3125	.3485	48.12	12.46	.4168	556.3	.3048-02
24	32.300	.12100	197.00	.4824	.5814	.6478	49.41	23.84	.4125	560.4	.5731-02
24	32.300	.12300	194.00	.4166	.5022	.5596	49.38	20.57	.4129	560.9	.4949-02
24	32.300	.12730	208.00	.1469	.1770	.1973	49.33	7.245	.4135	561.7	.1745-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A007)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
24	32.300	.13420	209.00	.2655	.3202	.3569	49.30	13.09	.4139	562.3	.3155-02
24	32.400	.10000+00	147.00	.5932	.7145	.7958	49.57	29.41	.4107	558.0	.7043-02
24	32.400	.10110	184.00	.5731	.6902	.7687	49.59	28.42	.4104	557.6	.6804-02
24	32.400	.10630	193.00	.1668	.2009	.2237	49.56	8.264	.4109	558.2	.1980-02
24	32.500	.85800-01	183.00	.2397	.2886	.3213	49.64	11.90	.4099	556.8	.2845-02
25	32.500	.92500-01	144.00	.4444	.5368	.5990	47.57	21.14	.4189	554.6	.5206-02
25	32.600	.79500-01	137.00	.6420	.7751	.8647	47.68	30.61	.4176	552.9	.7517-02
24	32.600	.80800-01	176.00	.6801	.8189	.9119	49.64	33.76	.4099	556.8	.8072-02
25	32.700	.67400-01	132.00	.3283	.3963	.4421	47.71	15.66	.4173	552.6	.3844-02
25	32.700	.72400-01	134.00	.4459	.5383	.6005	47.71	21.27	.4173	552.5	.5221-02
25	32.800	.65700-01	130.00	.2322	.2802	.3125	47.79	11.10	.4163	551.2	.2718-02
24	32.800	.16680	210.00	.2213	.2666	.2971	49.42	10.93	.4124	560.3	.2628-02
23	32.800	.18880	225.00	.1166	.1408	.1570	48.12	5.613	.4168	556.3	.1373-02
23	32.800	.21170	239.00	.1093	.1320	.1473	48.07	5.256	.4174	557.2	.1287-02
25	32.900	.58600-01	118.00	.5575	.6728	.7504	47.78	26.64	.4164	551.4	.6525-02
25	32.900	.60400-01	122.00	.4728	.5705	.6363	47.80	22.60	.4162	551.1	.5534-02
24	32.900	.61300-01	171.00	.4441	.5344	.5949	49.77	22.10	.4084	554.8	.5268-02
25	33.000	.53500-01	115.00	.4515	.5447	.6075	47.83	21.60	.4158	550.6	.5284-02
25	33.200	.46800-01	111.00	.2380	.2872	.3204	47.77	11.37	.4165	551.6	.2786-02
25	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	33.400	.42800-01	166.00	.6352	.7645	.8511	49.75	31.60	.4086	555.1	.7537-02
25	33.500	.40100-01	99.000	.6211	.7498	.8365	47.71	29.63	.4173	552.6	.7272-02
25	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	33.600	.38300-01	97.000	.6456	.7795	.8697	47.66	30.77	.4178	553.2	.7560-02
25	33.700	.36700-01	96.000	.7182	.8671	.9674	47.67	34.23	.4177	553.1	.8409-02
25	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	34.700	.18700	227.00	.2324	.2807	.3131	48.01	11.16	.4181	558.1	.2737-02
23	34.700	.21010	240.00	.1971	.2379	.2655	48.01	9.460	.4181	558.1	.2321-02
24	34.900	.16480	212.00	.2999	.3615	.4028	49.37	14.80	.4131	561.2	.3563-02
24	35.100	.10000+00	148.00	.5858	.7054	.7856	49.61	29.06	.4103	557.4	.6954-02
24	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	35.300	.22100-01	160.00	.1657	.1993	.2218	49.93	8.274	.4066	552.4	.1965-02
25	35.300	.92500-01	145.00	.4254	.5137	.5731	47.64	20.27	.4181	553.6	.4982-02
23	35.400	.18800	231.00	.2395	.2891	.3225	48.12	11.53	.4168	556.3	.2820-02
24	35.500	.12100	196.00	.4820	.5808	.6472	49.42	23.82	.4124	560.3	.5725-02
24	35.600	.16580	216.00	.2886	.3478	.3876	49.38	14.25	.4129	560.9	.3428-02
25	35.800	.80600-01	138.00	.5699	.6880	.7676	47.68	27.17	.4177	553.0	.6673-02
23	35.900	.21310	247.00	.1484	.1791	.1997	48.20	7.152	.4159	555.1	.1746-02
23	36.000	.19040	235.00	.1921	.2319	.2586	48.15	9.250	.4165	555.9	.2261-02
25	36.200	.72400-01	135.00	.3482	.4202	.4686	47.78	16.63	.4165	551.5	.4075-02
24	36.200	.16810	220.00	.2569	.3096	.3450	49.43	12.70	.4124	560.2	.3052-02
24	36.300	.12200	200.00	.4799	.5783	.6444	49.42	23.72	.4124	560.3	.5700-02
25	36.600	.65700-01	131.00	.3176	.3834	.4277	47.72	15.16	.4172	552.4	.3719-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A007)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
23	36.700	.18700	226.00	.2237	.2700	.3012	48.12	10.77	.4168	556.3	.2633-02
24	36.900	.10110	187.00	.5433	.6542	.7286	49.63	26.96	.4101	557.1	.6449-02
24	36.900	.16480	211.00	.2742	.3305	.3683	49.38	13.54	.4129	560.9	.3257-02
25	37.000	.60400-01	123.00	.5934	.7161	.7986	47.80	28.37	.4161	551.0	.6945-02
24	37.000	.12440	204.00	.4110	.4953	.5520	49.40	20.31	.4126	560.6	.4882-02
25	37.100	.58600-01	119.00	.5598	.6757	.7538	47.71	26.71	.4172	552.4	.6553-02
23	37.200	.21310	246.00	.1521	.1835	.2047	48.18	7.328	.4161	555.5	.1790-02
23	37.300	.19040	234.00	.1859	.2244	.2503	48.09	8.941	.4171	556.8	.2189-02
25	37.600	.53500-01	116.00	.4973	.6001	.6693	47.77	23.75	.4165	551.5	.5821-02
24	37.600	.16810	219.00	.2305	.2778	.3096	49.38	11.38	.4129	560.9	.2739-02
24	37.800	.10270	150.00	.4249	.5118	.5701	49.53	21.04	.4112	558.6	.5045-02
24	37.900	.12100	195.00	.3370	.4061	.4525	49.40	16.65	.4126	560.6	.4003-02
24	38.000	.80300-01	179.00	.5508	.6630	.7382	49.72	27.39	.4090	555.7	.6536-02
25	38.500	.46800-01	112.00	.3165	.3820	.4261	47.76	15.12	.4166	551.6	.3705-02
24	38.600	.12440	203.00	.3535	.4261	.4748	49.36	17.45	.4131	561.2	.4199-02
24	38.700	.10000+00	185.00	.4579	.5514	.6141	49.61	22.71	.4103	557.4	.5435-02
25	38.900	.82200-01	141.00	.4875	.5886	.6566	47.69	23.25	.4175	552.8	.5708-02
25	39.300	.41600-01	104.00	.5868	.7085	.7905	47.67	27.97	.4177	553.1	.6872-02
24	39.500	.10270	190.00	.4640	.5586	.6220	49.68	23.05	.4095	556.3	.5507-02
24	39.600	.16810	218.00	.1961	.2364	.2634	49.38	9.685	.4129	560.9	.2330-02
25	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	39.900	.19040	233.00	.1521	.1837	.2049	48.07	7.313	.4174	557.1	.1791-02
24	40.100	.79500-01	177.00	.5375	.6470	.7204	49.70	26.71	.4093	556.0	.6378-02
24	40.200	.12440	202.00	.3345	.4032	.4494	49.34	16.50	.4134	561.6	.3974-02
23	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	41.100	.60700-01	173.00	.5969	.7183	.7996	49.78	29.72	.4083	554.7	.7082-02
25	41.100	.82200-01	142.00	.5426	.6551	.7309	47.67	25.86	.4177	553.1	.6353-02
24	42.300	.10270	189.00	.4085	.4919	.5478	49.62	20.27	.4101	557.2	.4849-02
24	42.600	.59600-01	172.00	.5989	.7207	.8023	49.77	29.81	.4084	554.8	.7105-02
24	43.200	.42000-01	168.00	.5266	.6337	.7055	49.76	26.21	.4085	555.0	.6248-02
24	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	43.600	.62900-01	128.00	.5960	.7193	.8023	47.76	28.47	.4166	551.6	.6977-02
25	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	45.000	.22900-01	8.0000	1.027	1.242	1.387	47.32	48.60	.4219	558.6	.1204-01
24	46.100	.62900-01	174.00	.6398	.7699	.8571	49.77	31.84	.4084	554.8	.7591-02
24	47.700	.40800-01	167.00	.5874	.7068	.7869	49.77	29.24	.4084	554.8	.6969-02
25	48.400	.44200-01	109.00	.6031	.7282	.8124	47.65	28.74	.4179	553.4	.7062-02
24	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	51.000	.12100-01	154.00	3.329	4.017	4.480	49.11	163.5	.4160	565.2	.3959-01
24	51.000	.17600-01	155.00	1.558	1.882	2.101	48.79	76.01	.4196	570.1	.1854-01
24	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
24	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A007)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
24	65.200	.24700-01	162.00	.7410	.8927	.9946	49.49	36.68	.4116	559.2	.8800-02
23	90.000	.91000-02	44.000	1.132	1.373	1.536	46.96	53.15	.4304	574.5	.1338-01
23	90.000	.11100-01	45.000	1.198	1.452	1.624	47.17	56.53	.4280	571.3	.1416-01
23	90.000	.13100-01	46.000	1.158	1.402	1.567	47.33	54.80	.4261	568.8	.1367-01
23	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	90.000	.17000-01	48.000	.8954	1.084	1.211	47.46	42.49	.4245	566.7	.1056-01
23	90.000	.20900-01	50.000	.7768	.9398	1.050	47.56	36.94	.4234	565.2	.9163-02
23	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	90.000	.26900-01	53.000	.6605	.7988	.8923	47.63	31.46	.4226	564.0	.7789-02
23	90.000	.28800-01	54.000	.6485	.7841	.8757	47.68	30.92	.4220	563.3	.7645-02
23	90.000	.32800-01	55.000	.3246	.3923	.4380	47.79	15.51	.4206	561.4	.3825-02
23	90.000	.36700-01	56.000	.5086	.6148	.6864	47.76	24.29	.4210	561.9	.5995-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	135.00	.19000-01	49.000	.7970	.9658	1.080	47.18	37.60	.4278	571.0	.9414-02
23	135.00	.22900-01	51.000	.7127	.8633	.9654	47.26	33.68	.4270	569.9	.8415-02
23	180.00	.91000-02	23.000	.3120	.3788	.4242	46.75	14.59	.4329	577.9	.3691-02
23	180.00	.11100-01	24.000	.8057	.9772	1.094	46.99	37.86	.4301	574.0	.9524-02
23	180.00	.13100-01	25.000	1.039	1.260	1.409	47.12	48.97	.4285	572.0	.1228-01
23	180.00	.15000-01	26.000	.9636	1.168	1.306	47.20	45.48	.4276	570.8	.1138-01
23	180.00	.17000-01	27.000	.8004	.9698	1.085	47.22	37.80	.4274	570.5	.9453-02
23	180.00	.19000-01	28.000	.7746	.9383	1.049	47.26	36.60	.4269	569.9	.9146-02
23	180.00	.20900-01	29.000	.7367	.8922	.9974	47.32	34.86	.4262	568.9	.8697-02
23	180 00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	180.00	.28800-01	32.000	.6038	.7307	.8165	47.49	28.68	.4242	566.2	.7124-02
23	180.00	.32800-01	33.000	.5265	.6370	.7117	47.56	25.04	.4234	565.1	.6210-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	225.00	.22900-01	30.000	.6893	.8331	.9302	47.79	32.94	.4207	561.5	.8124-02
23	270.00	.91000-02	63.000	.4746	.5748	.6426	47.31	22.46	.4263	569.0	.5603-02
23	270.00	.11100-01	64.000	.7387	.8938	.9987	47.53	35.12	.4237	565.5	.8714-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A007)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
23	270.00	.13100-01	65.000	1.056	1.276	1.425	47.75	50.41	.4212	562.2	.1245-01
23	270.00	.17000-01	67.000	.7479	.9030	1.008	48.01	35.91	.4181	558.1	.8807-02
23	270.00	.20900-01	69.000	.7265	.8767	.9777	48.19	35.01	.4160	555.3	.8550-02
23	270.00	.24900-01	71.000	.6932	.8363	.9327	48.20	33.41	.4159	555.1	.8157-02
23	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28900-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.30800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95900-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	315.00	.15000-01	66.000	.8749	1.056	1.178	48.07	42.05	.4174	557.2	.1030-01
23	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	0000
23	315.00	.22900-01	70.000	.6971	.8408	.9374	48.29	33.66	.4148	553.7	.8201-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A012)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = -6.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
11	.0000	-6.000	5.300	.4769+07	404.2	1338.	327.2	.5321	206.0	.2167-03	3729.	.2750-01
12	.0000	-6.000	5.300	.4843+07	406.2	1329.	324.9	.5349	204.6	.2194-03	3716.	.2750-01
13	.0000	-6.000	5.300	.4802+07	402.6	1328.	324.8	.5302	204.6	.2175-03	3716.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
11	.0000	.2577
12	.0000	.2582
13	.0000	.2571

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
13	.00000	.91000-02	1.0000	.5567	.6770	.7589	46.92	26.12	.4368	591.4	.6679-02
13	.00000	.11100-01	2.0000	1.099	1.335	1.496	47.12	51.78	.4346	588.3	.1317-01
13	.00000	.13100-01	3.0000	.1946	.2357	.2636	47.82	9.307	.4264	577.3	.2327-02
13	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	.00000	.17000-01	5.0000	.9411	1.142	1.279	47.35	44.56	.4319	584.7	.1127-01
13	.00000	.19000-01	6.0000	.8513	1.033	1.157	47.32	40.28	.4322	585.2	.1020-01
13	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	.00000	.24900-01	9.0000	.7176	.8708	.9750	47.35	33.97	.4319	584.7	.8594-02
13	.00000	.26900-01	10.000	.5977	.7255	.8123	47.32	28.29	.4322	585.1	.7160-02
13	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	.00000	.32800-01	12.000	.5109	.6193	.6927	48.10	24.57	.4285	584.3	.6127-02
11	.00000	.36700-01	13.000	.4720	.5718	.6394	48.22	22.76	.4270	582.3	.5658-02
11	.00000	.40600-01	14.000	.5063	.6136	.6863	48.13	24.37	.4281	583.8	.6071-02
11	.00000	.44500-01	15.000	.4484	.5432	.6075	48.20	21.61	.4273	582.7	.5375-02
11	.00000	.56400-01	16.000	.4453	.5394	.6032	48.22	21.47	.4270	582.3	.5337-02
11	.00000	.76100-01	17.000	.3319	.4018	.4491	48.37	16.05	.4254	580.1	.3976-02
11	.00000	.95800-01	18.000	.2585	.3129	.3497	48.42	12.52	.4247	579.2	.3097-02
11	.00000	.11550	19.000	.2104	.2549	.2850	48.21	10.14	.4271	582.4	.2522-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A012)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
11	.00000	.16480	20.000	.1196	.1447	.1616	48.50	5.799	.4238	577.9	.1432-02
11	.00000	.18450	21.000	.9247-01	.1120	.1252	48.31	4.467	.4260	580.9	.1108-02
11	.00000	.21400	22.000	.6046-01	.7320-01	.8183-01	48.34	2.923	.4257	580.4	.7244-03
12	2.0000	.24700-01	165.00	.5969	.7225	.8075	48.17	28.76	.4249	575.4	.7103-02
12	9.0000	.15000-01	157.00	1.042	1.260	1.408	48.26	50.27	.4239	574.1	.1239-01
12	9.0000	.17600-01	158.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	9.8000	.24700-01	164.00	.5700	.6900	.7712	48.16	27.45	.4251	575.6	.6783-02
13	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	0000	.0000	.0000
13	10.000	.30800-01	92.000	.5359	.6505	.7285	47.28	25.33	.4327	585.8	.6420-02
13	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	12.000	.12100-01	151.00	4.013	4.879	5.469	47.19	189.4	.4363	590.8	.4793-01
12	12.000	.17600-01	152.00	1.844	2.250	2.528	46.41	85.59	.4453	603.0	.2209-01
12	13.000	.19400-01	153.00	1.141	1.393	1.566	46.16	52.65	.4483	607.0	.1368-01
12	14.600	.44200-01	169.00	.6018	.7281	.8135	48.29	29.06	.4236	573.6	.7158-02
13	18.500	.44200-01	106.00	.5980	.7255	.8121	47.42	28.36	.4310	583.6	.7160-02
12	19.600	.62900-01	175.00	.4559	.5513	.6158	48.40	22.06	.4223	571.9	.5420-02
13	19.800	.40800-01	101.00	.6086	.7386	.8269	47.35	28.82	.4319	584.7	.7289-02
13	20.000	.24900-01	89.000	.4051	.4918	.5508	47.28	19.15	.4327	585.8	.4854-02
13	20.000	.28800-01	91.000	.3955	.4801	.5377	47.28	18.70	.4327	585.8	.4738-02
13	20.000	.32800-01	93.000	.5024	.6099	.6830	47.26	23.74	.4329	586.1	.6019-02
12	21.800	.82200-01	182.00	.3786	.4578	.5112	48.45	18.35	.4217	571.0	.4501-02
13	22.200	.62900-01	125.00	.4916	.5958	.6665	47.64	23.42	.4285	580.1	.5881-02
13	22.400	.44200-01	107.00	.6086	.7383	.8264	47.43	28.86	.4310	583.5	.7287-02
12	22.600	.10270	192.00	.2713	.3280	.3663	48.46	13.14	.4217	571.0	.3225-02
13	23.000	.42000-01	105.00	.7185	.8720	.9762	47.36	34.03	.4317	584.5	.8605-02
13	23.400	.59600-01	120.00	.5576	.6759	.7561	47.64	26.57	.4285	580.2	.6672-02
11	23.900	.21310	250.00	.4069-01	.4920-01	.5495-01	48.67	1.980	.4219	575.3	.4870-03
13	24.100	.82200-01	139.00	.4822	.5841	.6531	47.79	23.04	.4268	577.8	.5766-02
12	24.400	.12440	207.00	.2140	.2590	.2893	48.29	10.34	.4236	573.6	.2546-02
11	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	24.800	.16810	223.00	.1059	.1280	.1430	48.64	5.149	.4223	575.8	.1267-02
13	24.900	.62900-01	126.00	.6113	.7408	.8287	47.66	29.13	.4283	579.8	.7313-02
12	25.000	.79500-01	178.00	.4749	.5742	.6412	48.45	23.01	.4218	571.2	.5645-02
12	25.300	.10000+00	186.00	.3666	.4433	.4950	48.45	17.76	.4217	571.1	.4358-02
12	25.300	.10270	191.00	.3533	.4272	.4770	48.47	17.13	.4215	570.8	.4200-02
13	25.500	.60700-01	124.00	.7524	.9120	1.020	47.64	35.84	.4285	580.2	.9002-02
12	26.000	.12440	206.00	.2855	.3454	.3859	48.32	13.80	.4233	573.2	.3396-02
13	26.300	.82200-01	140.00	.5192	.6287	.7029	47.84	24.84	.4262	577.0	.6207-02
12	26.700	.12100	199.00	.4480	.5418	.6052	48.40	21.68	.4224	572.0	.5327-02
11	26.800	.16810	222.00	.1587	.1918	.2142	48.71	7.728	.4215	574.7	.1899-02
11	27.000	.19040	237.00	.1248	.1510	.1686	48.62	6.070	.4225	576.1	.1494-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A012)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
11	27.100	.21310	249.00	.7517-01	.9082-01	.1014	48.87	3.673	.4196	572.2	.8990-03
12	27.200	.80300-01	180.00	.6614	.7997	.8930	48.46	32.05	.4217	571.0	.7863-02
12	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	27.400	.40100-01	98.000	.6846	.8304	.9294	47.46	32.49	.4306	582.9	.8196-02
12	27.400	.16480	215.00	.1866	.2256	.2520	48.46	9.042	.4217	571.0	.2218-02
13	27.600	.41600-01	102.00	.7647	.9276	1.038	47.46	36.29	.4306	583.0	.9155-02
12	27.600	.12440	205.00	.3609	.4365	.4876	48.35	17.45	.4228	572.6	.4291-02
11	27.600	.18700	230.00	.1405	.1699	.1897	48.62	6.828	.4225	576.1	.1681-02
11	27.700	.21010	243.00	.1169	.1413	.1578	48.72	5.695	.4213	574.5	.1399-02
12	27.900	.10110	188.00	.4950	.5984	.6683	48.47	23.99	.4215	570.8	.5884-02
13	28.000	.46800-01	110.00	.2660	.3227	.3611	47.49	12.64	.4302	582.4	.3185-02
11	28.200	.16810	221.00	.2128	.2571	.2871	48.80	10.38	.4204	573.2	.2545-02
12	28.300	.12200	201.00	.2767	.3346	.3737	48.38	13.39	.4225	572.2	.3290-02
11	28.300	.19040	236.00	.1321	.1598	.1785	48.65	6.429	.4221	575.6	.1581-02
13	28.400	.53500-01	114.00	.3568	.4326	.4840	47.58	16.98	.4292	581.1	.4270-02
11	28.400	.21310	248.00	.1023	.1236	.1380	48.87	5.000	.4196	572.2	.1224-02
13	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	28.800	.60400-01	121.00	.8070	.9779	1.094	47.71	38.50	.4277	579.0	.9653-02
12	28.800	.16580	217.00	.2602	.3145	.3512	48.47	12.61	.4215	570.8	.3093-02
11	28.900	.18800	232.00	.1754	.2122	.2370	48.62	8.530	.4224	576.0	.2100-02
13	29.000	.65700-01	129.00	.2956	.3581	.4005	47.72	14.10	.4276	579.0	.3535-02
11	29.000	.21110	244.00	.1252	.1513	.1689	48.80	6.107	.4204	573.3	.1497-02
13	29.200	.72400-01	133.00	.3875	.4694	.5248	47.82	18.53	.4265	577.4	.4634-02
13	29.300	.79500-01	136.00	.8312	1.006	1.125	47.89	39.81	.4256	576.2	.9935-02
13	29.600	.92500-01	143.00	.3135	.3795	.4241	47.95	15.03	.4249	575.3	.3746-02
12	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	29.900	.12100	198.00	.4548	.5499	.6140	48.46	22.04	.4216	571.0	.5406-02
12	30.200	.16480	214.00	.2911	.3518	.3928	48.53	14.13	.4208	569.9	.3459-02
11	30.200	.18700	229.00	.1915	.2316	.2587	48.67	9.323	.4219	575.3	.2292-02
11	30.300	.21010	242.00	.1466	.1771	.1978	48.76	7.145	.4209	574.0	.1753-02
13	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	31.500	.11100-01	83.000	1.071	1.301	1.458	47.08	50.43	.4351	589.0	.1284-01
13	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	31.500	.16000-01	85.000	1.622	1.987	2.238	45.36	73.58	.4550	616.1	.1958-01
13	31.500	.17600-01	86.000	1.133	1.390	1.567	45.10	51.12	.4581	620.2	.1370-01
13	31.500	.19400-01	87.000	.7986	.9800	1.106	44.95	35.90	.4598	622.6	.9656-02
11	32.100	.21010	241.00	.1057	.1277	.1426	48.81	5.158	.4202	573.0	.1264-02
12	32.200	.16480	213.00	.2287	.2764	.3085	48.59	11.11	.4202	569.0	.2718-02
11	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	32.200	.18700	228.00	.1320	.1595	.1780	48.93	6.461	.4189	571.2	.1579-02
12	32.300	.12100	197.00	.3404	.4114	.4594	48.51	16.51	.4210	570.1	.4045-02
12	32.300	.12300	194.00	.3496	.4227	.4720	48.45	16.94	.4217	571.0	.4156-02
12	32.300	.12730	208.00	.7852-01	.9491-01	.1060	48.52	3.810	.4210	570.1	.9332-03

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A012)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
12	32.300	.13420	209.00	.1676	.2025	.2261	48.59	8.143	.4201	568.9	.1991-02
12	32.400	.10000+00	147.00	.3878	.4685	.5230	48.62	18.86	.4198	568.4	.4607-02
12	32.400	.10110	184.00	.4669	.5643	.6301	48.54	22.67	.4207	569.7	.5549-02
12	32.400	.10630	193.00	.1070	.1293	.1443	48.55	5.194	.4205	569.5	.1271-02
12	32.500	.85800-01	183.00	.1583	.1913	.2135	48.58	7.690	.4202	569.0	.1881-02
13	32.500	.92500-01	144.00	.3453	.4178	.4669	48.02	16.58	.4241	574.2	.4125-02
13	32.600	.79500-01	137.00	.7370	.8921	.9970	47.96	35.34	.4248	575.2	.8807-02
12	32.600	.80800-01	176.00	.6490	.7841	.8752	48.62	31.55	.4198	568.5	.7710-02
13	32.700	.67400-01	132.00	.2491	.3017	.3373	47.83	11.92	.4263	577.2	.2979-02
13	32.700	.72400-01	134.00	.3602	.4362	.4876	47.88	17.25	.4258	576.4	.4306-02
13	32.800	.65700-01	130.00	.1624	.1967	.2199	47.85	7.770	.4261	576.9	.1941-02
12	32.800	.16680	210.00	.1714	.2070	.2310	48.67	8.339	.4192	567.7	.2035-02
11	32.800	.18880	225.00	.6489-01	.7844-01	.8758-01	48.76	3.154	.4209	573.9	.7764-03
11	32.800	.21170	239.00	.6003-01	.7255-01	.8098-01	48.82	2.931	.4202	572.9	.7181-03
13	32.900	.58600-01	118.00	.4867	.5896	.6592	47.79	23.26	.4268	577.8	.5820-02
13	32.900	.60400-01	122.00	.5128	.6207	.6937	47.95	24.59	.4249	575.3	.6128-02
12	32.900	.61300-01	171.00	.6756	.8165	.9116	48.54	32.79	.4207	569.7	.8028-02
13	33.000	.53500-01	115.00	.3881	.4701	.5256	47.79	18.54	.4268	577.9	.4640-02
13	33.200	.46800-01	111.00	.2037	.2470	.2763	47.59	9.694	.4291	580.9	.2437-02
13	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	33.400	.42800-01	166.00	.6866	.8303	.9274	48.40	33.23	.4223	571.8	.8163-02
13	33.500	.40100-01	99.000	.5690	.6897	.7715	47.64	27.11	.4285	580.2	.6808-02
13	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	33.600	.38300-01	97.000	.4488	.5441	.6088	47.57	21.35	.4294	581.3	.5371-02
13	33.700	.36700-01	96.000	.3955	.4796	.5367	47.53	18.80	.4297	581.8	.4734-02
13	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	34.700	.18700	227.00	.1546	.1870	.2088	48.67	7.525	.4219	575.3	.1851-02
11	34.700	.21010	240.00	.9394-01	.1135	.1266	48.91	4.595	.4191	571.5	.1123-02
12	34.900	.16480	212.00	.1725	.2083	.2325	48.69	8.397	.4190	567.4	.2048-02
12	35.100	.10000+00	148.00	.3305	.3991	.4454	48.73	16.11	.4185	566.7	.3925-02
12	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	35.300	.22100-01	160.00	.1746	.2110	.2356	48.58	8.484	.4202	569.0	.2075-02
13	35.300	.92500-01	145.00	.3335	.4032	.4503	48.23	16.09	.4216	570.8	.3982-02
11	35.400	.18800	231.00	.1218	.1470	.1641	49.00	5.967	.4181	570.1	.1456-02
12	35.500	.12100	196.00	.2942	.3555	.3968	48.61	14.30	.4199	568.7	.3496-02
12	35.600	.16580	216.00	.1575	.1902	.2123	48.73	7.677	.4185	566.7	.1871-02
13	35.800	.80600-01	138.00	.4265	.5159	.5762	48.15	20.54	.4226	572.1	.5093-02
11	35.900	.21310	247.00	.7190-01	.8677-01	.9677-01	49.17	3.535	.4162	567.5	.8591-03
11	36.000	.19040	235.00	.9547-01	.1153	.1286	49.03	4.681	.4178	569.7	.1141-02
13	36.200	.72400-01	135.00	.2702	.3267	.3648	48.22	13.03	.4218	571.0	.3226-02
12	36.200	.16810	220.00	.1398	.1687	.1882	48.81	6.821	.4176	565.5	.1659-02
12	36.300	.12200	200.00	.2676	.3233	.3608	48.65	13.02	.4195	568.0	.3179-02
13	36.600	.65700-01	131.00	.1821	.2204	.2463	48.01	8.743	.4242	574.4	.2176-02

DATE 28 AUG 79 AMES 3.5-237 FH-16 COLLATION DECK (R3A012)

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
11	36.700	.18700	226.00	.1262	.1524	.1700	49.02	6.187	.4178	569.8	.1509-02
12	36.900	.10110	187.00	.3788	.4574	.5104	48.76	18.47	.4182	566.3	.4498-02
12	36.900	.16480	211.00	.1637	.1977	.2205	48.78	7.985	.4179	566.0	.1944-02
13	37.000	.60400-01	123.00	.5323	.6440	.7195	49.07	25.59	.4235	573.3	.6358-02
12	37.000	.12440	204.00	.2212	.2672	.2982	48.66	10.76	.4193	567.8	.2627-02
13	37.100	.58600-01	119.00	.4784	.5791	.6472	47.94	22.93	.4250	575.4	.5717-02
11	37.200	.21310	246.00	.7927-01	.9565-01	.1067	49.18	3.898	.4160	567.3	.9470-03
11	37.300	.19040	234.00	.1079	.1303	.1454	49.02	5.291	.4178	569.8	.1290-02
13	37.600	.53500-01	116.00	.4835	.5852	.6540	47.98	23.20	.4246	574.9	.5778-02
12	37.600	.16810	219.00	.1399	.1689	.1885	48.76	6.823	.4181	566.2	.1661-02
12	37.800	.10270	150.00	.3046	.3678	.4104	48.76	14.85	.4182	566.3	.3617-02
12	37.900	.12100	195.00	.2681	.3238	.3614	48.66	13.04	.4193	567.8	.3184-02
12	38.000	.80300-01	179.00	.5019	.6059	.6760	48.82	24.50	.4175	565.4	.5959-02
13	38.500	.46800-01	112.00	.2836	.3435	.3840	47.86	13.57	.4260	576.7	.3391-02
12	38.600	.12440	203.00	.2288	.2764	.3085	48.65	11.13	.4195	568.0	.2718-02
12	38.700	.10000+00	185.00	.3928	.4743	.5293	48.75	19.15	.4182	566.4	.4665-02
13	38.900	.82200-01	141.00	.3272	.3954	.4414	48.37	15.83	.4200	568.7	.3904-02
13	39.300	.41600-01	104.00	.4567	.5532	.6186	47.79	21.82	.4268	577.8	.5461-02
12	39.500	.10270	190.00	.3991	.4817	.5373	48.87	19.50	.4169	564.6	.4738-02
12	39.600	.16810	218.00	.1199	.1448	.1616	48.81	5.854	.4176	565.5	.1424-02
13	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	39.900	.19040	233.00	.8856-01	.1069	.1192	49.13	4.351	.4166	568.1	.1058-02
12	40.100	.79500-01	177.00	.4873	.5882	.6561	48.86	23.81	.4171	564.8	.5785-02
12	40.200	.12440	202.00	.2162	.2612	.2915	48.67	10.52	.4192	567.6	.2568-02
11	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	41.100	.60700-01	173.00	.5047	.6093	.6798	48.82	24.64	.4175	565.3	.5992-02
13	41.100	.82200-01	142.00	.3691	.4458	.4976	48.44	17.88	.4192	567.6	.4403-02
12	42.300	.10270	199.00	.2949	.3559	.3970	48.88	14.41	.4168	564.4	.3500-02
12	42.600	.59600-01	172.00	.5684	.6863	.7658	48.77	27.72	.4181	566.2	.6749-02
12	43.200	.42000-01	168.00	.4033	.4872	.5437	48.66	19.62	.4193	567.9	.4791-02
12	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	43.600	.62900-01	128.00	.3838	.4637	.5177	48.37	18.56	.4201	568.7	.4579-02
13	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
13	45.000	.22900-01	8.0000	.9499	1.153	1.292	47.23	44.86	.4333	586.6	.1138-01
12	46.100	.62900-01	174.00	.4635	.5594	.6239	48.89	22.66	.4166	564.2	.5502-02
12	47.700	.40800-01	167.00	.4416	.5336	.5956	48.62	21.47	.4198	568.5	.5247-02
13	48.400	.44200-01	109.00	.4241	.5130	.5730	48.15	20.42	.4226	572.2	.5065-02
12	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	51.000	.12100-01	154.00	2.604	3.164	3.546	47.28	123.1	.4353	589.4	.3109-01
12	51.000	.17600-01	155.00	1.090	1.325	1.485	47.15	51.39	.4368	591.5	.1302-01
12	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
12	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A012)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
12	65.200	.24700-01	162.00	.6822	.8234	.9186	48.85	33.33	.4171	564.8	.8098-02
11	90.000	.91000-02	44.000	.3649	.4428	.4958	47.80	17.44	.4319	588.9	.4380-02
11	90.000	.11100-01	45.000	.7494	.9082	1.016	48.11	36.05	.4283	584.0	.8986-02
11	90.000	.13100-01	46.000	1.230	1.489	1.664	48.40	59.51	.4251	579.6	.1473-01
11	90.000	.15000-01	47.000	.9830	1.187	1.325	48.93	48.09	.4189	571.3	.1175-01
11	90.000	.17000-01	48.000	.8226	.9943	1.110	48.76	40.11	.4209	573.9	.9842-02
11	90.000	.20900-01	50.000	.7480	.9034	1.008	48.95	36.61	.4187	570.9	.8943-02
11	90.000	.24900-01	52.000	.5974	.7207	.8036	49.24	29.41	.4154	566.4	.7136-02
11	90.000	.26900-01	53.000	.6512	.7856	.8759	49.23	32.06	.4154	566.5	.7778-02
11	90.000	.28800-01	54.000	.6274	.7567	.8436	49.29	30.93	.4147	565.5	.7493-02
11	90.000	.32800-01	55.000	.3345	.4031	.4492	49.49	16.56	.4125	562.5	.3992-02
11	90.000	.36700-01	56.000	.4605	.5549	.6184	49.47	22.78	.4127	562.7	.5495-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	135.00	.19000-01	49.000	.7840	.9459	1.055	49.19	38.57	.4159	567.1	.9366-02
11	135.00	.22900-01	51.000	.7362	.8874	.9889	49.45	36.40	.4130	563.1	.8787-02
11	180.00	.91000-02	23.000	.3018	.3666	.4107	47.58	14.36	.4345	592.5	.3626-02
11	180.00	.11100-01	24.000	1.206	1.460	1.632	48.36	58.31	.4255	580.2	.1445-01
11	180.00	.13100-01	25.000	1.045	1.263	1.410	48.77	50.96	.4208	573.8	.1250-01
11	180.00	.15000-01	26.000	.9855	1.190	1.328	48.95	48.24	.4187	570.9	.1178-01
11	180.00	.17000-01	27.000	.9219	1.113	1.241	49.09	45.26	.4170	568.7	.1102-01
11	180.00	.19000-01	28.000	.8694	1.049	1.169	49.24	42.81	.4154	566.4	.1038-01
11	180.00	.20900-01	29.000	.8156	.9834	1.096	49.38	40.28	.4137	564.1	.9737-02
11	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	180.00	.28800-01	32.000	.6228	.7502	.8356	49.60	30.89	.4112	560.7	.7429-02
11	180.00	.32800-01	33.000	.5419	.6526	.7269	49.66	26.91	.4105	559.8	.6464-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	225.00	.22900-01	30.000	.7871	.9491	1.058	49.34	38.83	.4142	564.8	.9398-02
11	270.00	.91000-02	63.000	1.074	1.304	1.460	47.81	51.38	.4317	588.7	.1290-01
11	270.00	.11100-01	64.000	1.187	1.440	1.611	47.99	56.98	.4298	586.0	.1424-01

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H1/HREF (R3A012)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
11	270.00	.13100-01	65.000	1.079	1.307	1.462	48.22	52.03	.4271	582.4	.1293-01
11	270.00	.17000-01	67.000	.9666	1.169	1.306	48.58	46.96	.4230	576.7	.1157-01
11	270.00	.20900-01	69.000	.8712	1.053	1.176	48.72	42.45	.4213	574.5	.1042-01
11	270.00	.24900-01	71.000	.8153	.9852	1.100	48.82	39.81	.4201	572.9	.9753-02
11	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	315.00	.15000-01	66.000	.9610	1.165	1.304	48.00	46.13	.4296	585.8	.1153-01
11	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
11	315.00	.22900-01	70.000	.7904	.9579	1.071	48.14	39.05	.4280	583.6	.9477-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A014)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 RN/FT = 5.000

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
2	.0000	.0000	5.300	.4616+07	407.5	1372.	336.1	.5353	211.7	.2122-03	3779.	.2750-01
3	.0000	.0000	5.300	.4741+07	405.0	1344.	328.8	.5328	207.1	.2159-03	3738.	.2750-01
26	.0000	.0000	5.300	.5043+07	405.9	1295.	316.2	.5355	199.1	.2257-03	3666.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
2	.0000	.2592
3	.0000	.2580
26	.0000	.2576

•••TEST DATA•••

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
2	.00000	.91000-02	1.0000	.4657	.5623	.6274	50.58	23.55	.4182	585.9	.5637-02
2	.00000	.11100-01	2.0000	1.239	1.495	1.666	50.92	63.12	.4144	580.5	.1499-01
2	.00000	.13100-01	3.0000	.3013	.3630	.4044	51.17	15.42	.4118	576.8	.3640-02
2	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	.00000	.17000-01	5.0000	.9312	1.120	1.246	51.69	48.13	.4059	568.6	.1123-01
2	.00000	.19000-01	6.0000	.8848	1.063	1.183	51.85	45.88	.4041	566.1	.1067-01
2	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	.00000	.24900-01	9.0000	.8545	1.026	1.140	52.09	44.51	.4015	562.4	.1029-01
2	.00000	.26900-01	10.000	.7729	.9278	1.031	52.11	40.28	.4012	562.0	.9310-02
2	.00000	.28800-01	11.000	.6810	.8176	.9086	52.11	35.49	.4012	562.0	.8204-02
26	.00000	.32800-01	12.000	.6275	.7583	.8465	47.21	29.63	.4201	553.6	.7335-02
26	.00000	.36700-01	13.000	.5729	.6921	.7725	47.27	27.08	.4194	552.7	.6695-02
26	.00000	.40600-01	14.000	.6002	.7253	.8096	47.21	28.34	.4201	553.6	.7016-02
26	.00000	.48500-01	15.000	.5578	.6740	.7523	47.24	26.35	.4197	553.1	.6520-02
26	.00000	.56400-01	16.000	.5348	.6462	.7214	47.20	25.24	.4202	553.7	.6241-02
26	.00000	.76100-01	17.000	.3899	.4713	.5263	47.12	18.37	.4212	555.0	.4559-02
26	.00000	.95800-01	18.000	.3335	.4033	.4505	47.00	15.67	.4226	556.8	.3901-02
26	.00000	.11550	19.000	.2569	.3110	.3476	46.78	12.02	.4252	560.3	.3007-02

(R3A014)

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
26	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	.00000	.18450	21.000	.1068	.1293	.1444	46.93	5.014	.4234	558.0	.1250-02
26	.00000	.21400	22.000	.6767-01	.8180-01	.9133-01	47.13	3.189	.4211	554.9	.7912-03
3	2.0000	.24700-01	165.00	.6754	.8129	.9051	50.10	33.84	.4090	560.5	.8070-02
3	9.0000	.15000-01	157.00	.8348	1.006	1.120	49.94	41.70	.4108	563.0	.9980-02
3	9.0000	.17600-01	158.00	.7245	.8720	.9709	50.10	36.29	.4091	560.6	.8657-02
3	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	9.8000	.24700-01	164.00	.6056	.7291	.8119	50.03	30.30	.4098	561.7	.7238-02
2	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	10.000	.26900-01	90.000	.6471	.7780	.8656	51.71	33.46	.4058	568.4	.7804-02
2	10.000	.30800-01	92.000	.6510	.7818	.8692	51.99	33.85	.4025	563.9	.7845-02
2	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	12.000	.12100-01	151.00	4.506	5.452	6.093	48.78	219.8	.4241	581.3	.5408-01
3	12.000	.17600-01	152.00	1.849	2.241	2.506	48.46	89.60	.4278	586.3	.2222-01
3	13.000	.19400-01	153.00	1.172	1.420	1.589	48.41	56.73	.4283	587.0	.1408-01
3	14.600	.44200-01	169.00	.5354	.7165	.7977	50.14	29.85	.4085	559.9	.7113-02
2	18.500	.44200-01	106.00	.5789	.6956	.7735	51.88	30.03	.4038	565.7	.6979-02
3	19.600	.62900-01	175.00	.4159	.5007	.5574	50.10	20.84	.4090	560.6	.4970-02
2	19.800	.40800-01	101.00	.5900	.7091	.7888	51.77	30.54	.4050	567.4	.7114-02
2	20.000	.24900-01	89.000	.4172	.5018	.5585	51.60	21.53	.4070	570.1	.5034-02
2	20.000	.28800-01	91.000	.4542	.5463	.6078	51.65	23.46	.4064	569.2	.5480-02
2	20.000	.32800-01	93.000	.5241	.6301	.7009	51.75	27.12	.4053	567.7	.6321-02
3	21.800	.82200-01	182.00	.3375	.4063	.4525	50.05	16.89	.4096	561.4	.4033-02
2	22.200	.62900-01	125.00	.4547	.5461	.6070	52.02	23.66	.4022	563.4	.5479-02
2	22.400	.44200-01	107.00	.5262	.6327	.7039	51.72	27.21	.4056	568.2	.6347-02
3	22.600	.10270	192.00	.2721	.3274	.3645	50.18	13.65	.4082	559.4	.3250-02
2	23.000	.42000-01	105.00	.6318	.7597	.8453	51.68	32.65	.4060	568.7	.7621-02
2	23.400	.59600-01	120.00	.4960	.5959	.6626	51.91	25.75	.4035	565.2	.5978-02
26	23.900	.21310	250.00	.7780-01	.9403-01	.1050	47.15	3.668	.4208	554.5	.9095-03
2	24.100	.82200-01	139.00	.3935	.4726	.5253	52.04	20.48	.4021	563.2	.4742-02
3	24.400	.12440	207.00	.2433	.2929	.3262	50.02	12.17	.4099	561.8	.2908-02
26	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	24.800	.16810	223.00	.1437	.1739	.1943	46.91	6.742	.4237	558.4	.1682-02
2	24.900	.62900-01	126.00	.2634	.3166	.3522	51.74	13.63	.4054	567.9	.3176-02
3	25.000	.79500-01	178.00	.3931	.4732	.5268	50.09	19.69	.4091	560.7	.4697-02
3	25.300	.10000+00	186.00	.3611	.4346	.4839	50.13	18.11	.4086	560.1	.4315-02
3	25.300	.10270	191.00	.3033	.3651	.4064	50.12	15.20	.4088	560.2	.3624-02
2	25.500	.60700-01	124.00	.5574	.6699	.7450	51.83	28.89	.4044	566.4	.6721-02
3	26.000	.12440	206.00	.2471	.2976	.3314	50.01	12.36	.4100	562.0	.2954-02
2	26.300	.82200-01	140.00	.3809	.4574	.5086	51.98	19.80	.4026	564.0	.4590-02
3	26.700	.12100	199.00	.3686	.4439	.4944	49.98	18.42	.4104	562.5	.4406-02
26	26.800	.16810	222.00	.1803	.2181	.2437	46.88	8.450	.4240	558.8	.2110-02
26	27.000	.19040	237.00	.1438	.1739	.1942	47.07	6.770	.4218	555.8	.1682-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A014)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
26	27.100	.21310	249.00	.8938-01	.1080	.1206	47.22	4.220	.4200	553.5	.1045-02
3	27.200	.80300-01	180.00	.4833	.5819	.6480	50.03	24.18	.4098	561.7	.5776-02
3	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	27.400	.40100-01	98.000	.6116	.7358	.8189	51.54	31.52	.4075	570.9	.7380-02
3	27.400	.16480	215.00	.2076	.2499	.2782	50.09	10.40	.4091	560.7	.2481-02
2	27.600	.41600-01	102.00	.6440	.7748	.8624	51.52	33.18	.4078	571.3	.7772-02
3	27.600	.12440	205.00	.2566	.3090	.3441	49.99	12.83	.4103	562.4	.3067-02
26	27.600	.18700	230.00	.1688	.2041	.2280	47.06	7.944	.4220	556.0	.1974-02
26	27.700	.21010	243.00	.1326	.1603	.1790	47.12	6.248	.4212	555.0	.1550-02
3	27.900	.10110	188.00	.3619	.4357	.4852	50.04	18.11	.4097	561.5	.4325-02
2	28.000	.46800-01	110.00	.2568	.3090	.3439	51.54	13.24	.4075	570.9	.3099-02
26	28.200	.16810	221.00	.2268	.2745	.3068	46.86	10.63	.4243	559.2	.2655-02
3	28.300	.12200	201.00	.2498	.3007	.3348	50.07	12.51	.4094	561.1	.2985-02
26	28.300	.19040	236.00	.1222	.1477	.1650	47.06	5.749	.4220	556.0	.1429-02
2	28.400	.53500-01	114.00	.4133	.4969	.5529	51.70	21.37	.4058	568.4	.4985-02
26	28.400	.21310	248.00	.9575-01	.1157	.1292	47.19	4.519	.4203	553.9	.1119-02
2	28.700	.58600-01	117.00	.5177	.6225	.6926	51.69	26.76	.4059	568.6	.6244-02
2	28.800	.60400-01	121.00	.5988	.7199	.8009	51.71	30.96	.4057	568.3	.7222-02
3	28.800	.16580	217.00	.2595	.3124	.3479	50.02	12.98	.4099	561.8	.3101-02
26	28.900	.18800	232.00	.1719	.2079	.2322	47.03	8.084	.4223	556.5	.2011-02
2	29.000	.65700-01	129.00	.2666	.3206	.3567	51.68	13.78	.4060	568.7	.3216-02
26	29.000	.21110	244.00	.1167	.1410	.1575	47.13	5.498	.4211	554.9	.1364-02
2	29.200	.72400-01	133.00	.2660	.3199	.3559	51.68	13.75	.4060	568.7	.3209-02
2	29.300	.79500-01	136.00	.5411	.6502	.7231	51.85	28.06	.4041	566.1	.6523-02
2	29.600	.92500-01	143.00	.3296	.3961	.4406	51.81	17.08	.4045	566.7	.3974-02
3	29.700	.10000+00	146.00	.4556	.5487	.6111	49.98	22.77	.4104	562.4	.5446-02
3	29.900	.12100	198.00	.3925	.4726	.5263	50.01	19.63	.4100	562.0	.4631-02
3	30.200	.16480	214.00	.2855	.3439	.3830	49.97	14.27	.4105	562.6	.3413-02
26	30.200	.18700	229.00	.1810	.2189	.2445	47.00	8.506	.4226	556.8	.2117-02
26	30.300	.21010	242.00	.1347	.1629	.1819	47.06	6.339	.4220	556.0	.1576-02
2	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	31.500	.11100-01	83.000	1.492	1.801	2.009	50.67	75.61	.4173	584.5	.1806-01
2	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	31.500	.16000-01	85.000	2.150	2.607	2.916	49.64	106.8	.4287	600.5	.2611-01
2	31.500	.17600-01	86.000	1.372	1.664	1.862	49.47	67.86	.4307	603.3	.1667-01
2	31.500	.19400-01	87.000	.8979	1.090	1.221	49.25	44.22	.4331	606.6	.1092-01
26	32.100	.21010	241.00	.1145	.1385	.1547	46.93	5.372	.4234	558.0	.1339-02
3	32.200	.16480	213.00	.2325	.2800	.3126	49.88	11.60	.4115	564.0	.2780-02
26	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	32.200	.18700	228.00	.1762	.2133	.2383	46.84	8.253	.4245	559.4	.2062-02
3	32.300	.12100	197.00	.3689	.4445	.4953	49.82	18.38	.4122	565.0	.4412-02
3	32.300	.12300	194.00	.3287	.3961	.4413	49.80	16.37	.4125	565.3	.3931-02
3	32.300	.12730	208.00	.1080	.1301	.1449	49.95	5.395	.4107	562.9	.1291-02

(R3A014)

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
3	32.300	.13420	209.00	.2176	.2620	.2918	49.99	10.88	.4103	562.4	.2601-02
3	32.400	.10000+00	147.00	.4244	.5114	.5698	49.83	21.15	.4121	564.8	.5076-02
3	32.400	.10110	184.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	32.400	.10630	193.00	.1189	.1433	.1596	49.88	5.932	.4116	564.1	.1422-02
3	32.500	.85800-01	183.00	.1647	.1985	.2212	49.81	8.204	.4124	565.2	.1970-02
2	32.500	.92500-01	144.00	.3370	.4052	.4508	51.70	17.42	.4056	568.4	.4064-02
2	32.600	.79500-01	137.00	.5385	.6475	.7205	51.65	27.81	.4063	569.2	.6496-02
3	32.600	.80800-01	176.00	.5143	.6199	.6908	49.75	25.59	.4130	566.0	.6[illegible]-02
2	32.700	.67400-01	132.00	.2586	.3110	.3460	51.62	13.35	.4067	569.7	.3119-02
2	32.700	.72400-01	134.00	.2820	.3392	.3774	51.65	14.57	.4064	569.2	.3402-02
2	32.800	.65700-01	130.00	.2020	.2430	.2704	51.60	10.43	.4069	569.9	.2438-02
3	32.800	.16680	210.00	.2119	.2552	.2842	50.00	10.60	.4102	562.2	.2533-02
26	32.800	.18880	225.00	.7850-01	.9499-01	.1061	46.91	3.632	.4237	558.4	.9186-03
26	32.800	.21170	239.00	.7209-01	.8725-01	.9751-01	46.85	3.378	.4244	559.3	.8438-03
2	32.900	.58600-01	118.00	.4838	.5820	.6476	51.59	24.96	.4070	570.1	.5838-02
2	32.900	.60400-01	122.00	.4191	.5042	.5612	51.53	21.60	.4077	571.0	.5057-02
3	32.900	.61300-01	171.00	.4792	.5773	.6432	49.86	23.89	.4118	564.3	.5730-02
2	33.000	.53500-01	115.00	.3766	.4533	.5047	51.39	19.35	.4093	573.3	.4546-02
2	33.200	.46800-01	111.00	.2074	.2496	.2779	51.42	10.66	.4089	572.8	.2503-02
2	33.200	.48300-01	113.00	.2327	.2801	.3118	51.46	11.98	.4085	572.2	.2809-02
3	33.400	.42800-01	166.00	.5589	.6737	.7508	49.74	27.80	.4131	566.1	.6686-02
2	33.500	.40100-01	99.000	.5791	.6970	.7761	51.40	29.76	.4092	573.1	.6991-02
2	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	33.600	.38300-01	97.000	.5828	.7017	.7814	51.34	29.92	.4098	574.1	.7037-02
2	33.700	.36700-01	96.000	.5936	.7145	.7956	51.38	30.50	.4094	573.5	.7166-02
2	33.900	.33800-01	95.000	.4476	.5390	.6002	51.31	22.97	.4101	574.5	.5405-02
26	34.700	.18700	227.00	.1650	.1997	.2231	46.83	7.726	.4246	559.5	.1931-02
26	34.700	.21010	240.00	.1256	.1520	.1698	46.85	5.883	.4244	559.2	.1470-02
3	34.900	.16480	212.00	.2030	.2446	.2725	49.85	10.12	.4119	564.5	.2428-02
3	35.100	.10000+00	148.00	.4023	.4848	.5402	49.80	20.03	.4125	565.3	.4812-02
3	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	35.300	.22100-01	160.00	.1772	.2136	.2380	49.78	8.824	.4126	565.5	.2120-02
2	35.300	.92500-01	145.00	.3570	.4293	.4776	51.69	18.45	.4059	568.6	.4306-02
26	35.400	.18800	231.00	.1626	.1968	.2200	46.84	7.618	.4245	559.4	.1904-02
3	35.500	.12100	196.00	.3416	.4117	.4588	49.78	17.01	.4126	565.5	.4086-02
3	35.600	.16580	216.00	.1895	.2284	.2545	49.82	9.443	.4122	564.9	.2267-02
2	35.800	.80600-01	138.00	.4139	.4978	.5540	51.60	21.36	.4069	570.0	.4994-02
26	35.900	.21310	247.00	.9610-01	.1163	.1299	46.93	4.510	.4234	558.0	.1124-02
26	36.000	.19040	235.00	.1292	.1564	.1747	46.88	6.058	.4241	558.9	.1512-02
2	36.200	.72400-01	135.00	.2739	.3293	.3664	51.68	14.16	.4060	568.7	.3304-02
3	36.200	.16810	220.00	.1636	.1971	.2196	49.85	8.157	.4119	564.5	.1957-02
3	36.300	.12200	200.00	.3230	.3893	.4338	49.78	16.08	.4126	565.5	.3863-02
2	36.600	.65700-01	131 00	.2593	.3119	.3471	51.62	13.39	.4067	569.7	.3129-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A014)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
26	36.700	.18700	226.00	.1496	.1811	.2024	46.84	7.009	.4246	559.5	.1751-02
3	36.900	.10110	187.00	.4096	.4934	.5497	49.86	20.42	.4118	564.3	.4898-02
3	36.900	.16480	211.00	.1837	.2213	.2466	49.88	9.165	.4115	564.0	.2197-02
2	37.000	.60400-01	123.00	.4918	.5916	.6583	51.60	25.38	.4069	570.0	.5934-02
3	37.000	.12440	204.00	.2475	.2981	.3320	49.94	12.36	.4109	563.2	.2959-02
2	37.100	.58600-01	119.00	.5015	.6035	.6719	51.46	25.81	.4084	572.1	.6054-02
26	37.200	.21310	246.00	.9986-01	.1208	.1350	46.92	4.685	.4236	558.2	.1168-02
26	37.300	.19040	234.00	.1281	.1551	.1733	46.83	6.001	.4246	559.5	.1500-02
2	37.600	.53500-01	116.00	.4760	.5728	.6376	51.48	24.51	.4082	571.8	.5745-02
3	37.600	.16810	219.00	.1570	.1892	.2108	49.80	7.818	.4124	565.3	.1878-02
3	37.800	.10270	150.00	.3047	.3673	.4093	49.74	15.15	.4132	566.3	.3645-02
3	37.900	.12100	195.00	.2809	.3387	.3774	49.73	13.97	.4133	566.4	.3361-02
3	38.000	.80300-01	179.00	.4247	.5119	.5704	49.80	21.15	.4124	565.2	.5080-02
2	38.500	.46800-01	112.00	.2702	.3253	.3622	51.39	13.89	.4092	573.2	.3262-02
3	38.600	.12440	203.00	.2457	.2960	.3297	49.92	12.27	.4111	563.4	.2938-02
3	38.700	.10000+00	185.00	.3787	.4563	.5084	49.82	18.87	.4122	564.9	.4529-02
2	38.900	.82200-01	141.00	.3254	.3914	.4356	51.59	16.79	.4070	570.1	.3926-02
2	39.300	.41600-01	104.00	.5414	.6520	.7262	51.26	27.75	.4107	575.4	.6539-02
3	39.500	.10270	190.00	.3180	.3834	.4274	49.66	15.79	.4141	567.5	.3805-02
3	39.600	.16810	218.00	.1375	.1657	.1846	49.80	6.847	.4125	565.3	.1645-02
2	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	39.900	.19040	233.00	.9793-01	.1185	.1325	46.83	4.586	.4246	559.5	.1146-02
3	40.100	.79500-01	177.00	.3746	.4515	.5031	49.80	18.65	.4125	565.4	.4481-02
3	40.200	.12440	202.00	.2408	.2900	.3230	49.99	12.04	.4103	562.3	.2879-02
26	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	41.100	.60700-01	173.00	.4578	.5519	.6150	49.75	22.78	.4130	566.0	.5477-02
2	41.100	.82200-01	142.00	.3175	.3820	.4252	51.54	16.37	.4076	570.9	.3832-02
3	42.300	.10270	189.00	.2521	.3038	.3385	49.81	12.56	.4124	565.1	.3015-02
3	42.600	.59600-01	172.00	.4443	.5355	.5968	49.73	22.09	.4132	566.3	.5315-02
3	43.200	.42000-01	168.00	.4900	.5908	.6585	49.67	24.34	.4139	567.3	.5863-02
3	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	43.600	.62900-01	128.00	.2737	.3292	.3663	51.62	14.13	.4068	569.8	.3302-02
2	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2	45.000	.22900-01	8.0000	1.161	1.399	1.558	51.24	59.51	.4109	575.6	.1403-01
3	46.100	.62900-01	174.00	.3832	.4619	.5148	49.75	19.06	.4131	566.1	.4584-02
3	47.700	.40800-01	167.00	.5345	.6445	.7184	49.67	26.55	.4140	567.4	.6396-02
2	48.400	.44200-01	109.00	.5080	.6119	.6816	51.22	26.02	.4111	575.9	.6136-02
3	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	51.000	.12100-01	154.00	3.735	4.521	5.053	48.70	181.9	.4250	582.4	.4484-01
3	51.000	.17600-01	155.00	1.657	2.011	2.251	48.07	79.62	.4322	592.4	.1993-01
3	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
3	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A014)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
3	65.200	.24700-01	162.00	.8478	1.023	1.142	49.36	41.85	.4175	572.2	.1016-01
26	90.000	.91000-02	44.000	.8762	1.064	1.192	46.05	40.35	.4339	571.8	.1029-01
26	90.000	.11100-01	45.000	1.535	1.863	2.086	46.18	70.88	.4323	569.7	.1801-01
26	90.000	.13100-01	46.000	1.320	1.601	1.792	46.34	61.17	.4304	567.2	.1548-01
26	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	90.000	.17000-01	48.000	.9669	1.173	1.312	46.39	44.86	.4298	566.4	.1134-01
26	90.000	.20900-01	50.000	.8935	1.083	1.212	46.45	41.51	.4291	565.5	.1047-01
26	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	90.000	.26900-01	53.000	.7366	.8929	.9989	46.49	34.24	.4297	564.9	.8633-02
26	90.000	.28800-01	54.000	.6962	.8438	.9438	46.52	32.39	.4283	564.4	.8158-02
26	90.000	.32800-01	55.000	.3577	.4332	.4844	46.66	16.69	.4266	562.2	.4189-02
26	90.000	.36700-01	56.000	.5183	.6279	.7021	46.62	24.16	.4272	562.9	.6071-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	135.00	.19000-01	49.000	.9081	1.101	1.232	46.40	42.13	.4298	566.4	.1065-01
26	135.00	.22900-01	51.000	.8308	1.007	1.127	46.47	38.61	.4289	565.2	.9738-02
26	180.00	.91000-02	23.000	.2816	.3421	.3833	45.95	12.94	.4351	573.3	.3307-02
26	180.00	.11100-01	24.000	1.422	1.725	1.930	46.34	65.90	.4304	567.2	.1668-01
26	180.00	.13100-01	25.000	1.184	1.435	1.605	46.54	55.09	.4281	564.1	.1387-01
26	180.00	.15000-01	26.000	1.113	1.348	1.508	46.62	51.89	.4271	562.8	.1304-01
26	180.00	.17000-01	27.000	.9983	1.197	1.338	46.66	46.12	.4266	562.2	.1157-01
26	180.00	.19000-01	28.000	.9250	1.120	1.252	46.74	43.24	.4257	560.9	.1083-01
26	180.00	.20900-01	29.000	.8644	1.046	1.169	46.83	40.48	.4247	559.6	.1012-01
26	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	180.00	.28800-01	32.000	.6703	.8108	.9056	47.00	31.50	.4227	557.0	.7842-02
26	180.00	.32800-01	33.000	.5711	.6906	.7712	47.06	26.88	.4218	555.9	.6679-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	225.00	.22900-01	30.000	.8092	.9781	1.092	47.15	38.15	.4209	554.6	.9460-02
26	270.00	.91000-02	63.000	.7550	.9153	1.024	46.46	35.08	.4290	565.3	.8849-02
26	270.00	.11100-01	64.000	1.422	1.722	1.925	46.65	66.31	.4268	562.4	.1665-01

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A014)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
26	270.00	.13100-01	65.000	1.247	1.509	1.686	46.88	58.45	.4241	558.9	.1459-01
26	270.00	.17000-01	67.000	.9597	1.160	1.295	47.12	45.22	.4212	555.0	.1122-01
26	270.00	.20900-01	69.000	.8679	1.049	1.171	47.21	40.97	.4201	553.6	.1014-01
26	270.00	.24900-01	71.000	.8026	.9699	1.083	47.20	37.89	.4202	553.7	.9382-02
26	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	315.00	.15000-01	66.000	1.031	1.247	1.393	47.06	48.53	.4219	556.0	.1206-01
26	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	315.00	.22900-01	70.000	.8483	1.025	1.144	47.28	40.11	.4193	552.6	.9913-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = 6.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
14	.0000	6.000	5.300	.5205+07	407.0	1271.	310.2	.5376	195.3	.2310-03	3631.	.2750-01
15	.0000	6.000	5.300	.4946+07	407.0	1313.	320.8	.5364	202.0	.2228-03	3693.	.2750-01
16	.0000	6.000	5.300	.5056+07	405.7	1292.	315.5	.5353	198.7	.2261-03	3662.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
14	.0000	.2576
15	.0000	.2582
16	.0000	.2575

***TEST DATA**

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
14	.00000	.91000-02	1.0000	.8867	1.080	1.212	44.56	39.51	.4417	571.0	.1030-01
14	.00000	.11100-01	2.0000	1.185	1.442	1.618	44.76	53.05	.4392	567.8	.1376-01
14	.00000	.13100-01	3.0000	.3493	.4236	.4741	45.52	15.90	.4300	556.0	.4042-02
14	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	.00000	.17000-01	5.0000	.8447	1.026	1.150	45.09	38.09	.4352	562.7	.9792-02
14	.00000	.19000-01	6.0000	.7959	.9672	1.084	45.09	35.89	.4352	562.6	.9226-02
14	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	.00000	.24900-01	9.0000	.6665	.8099	.9074	45.11	30.07	.4350	562.3	.7726-02
14	.00000	.26900-01	10.000	.6057	.7360	.8247	45.09	27.31	.4352	562.6	.7021-02
14	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	.00000	.32800-01	12.000	.5600	.6786	.7590	46.46	26.02	.4277	562.5	.6555-02
16	.00000	.36700-01	13.000	.4953	.5998	.6706	46.57	23.07	.4263	560.7	.5794-02
16	.00000	.40600-01	14.000	.5535	.6705	.7498	46.51	25.74	.4272	561.8	.6477-02
16	.00000	.48500-01	15.000	.4539	.5497	.6145	46.60	21.15	.4261	560.4	.5310-02
16	.00000	.56400-01	16.000	.4149	.5024	.5617	46.58	19.32	.4263	560.6	.4854-02
16	.00000	.76100-01	17.000	.3178	.3848	.4302	46.63	14.82	.4256	559.7	.3718-02
16	.00000	.95800-01	18.000	.2438	.2952	.3300	46.58	11.36	.4262	560.6	.2852-02
16	.00000	.11550	19.000	.1790	.2170	.2427	46.38	8.301	.4287	563.8	.2096-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A016)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
16	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	.00000	.18450	21.000	.9651-01	.1169	.1307	46.57	4.495	.4264	560.7	.1129-02
16	.00000	.21400	22.000	.6405-01	.7755-01	.8668-01	46.66	2.989	.4254	559.4	.7492-03
15	2.0000	.24700-01	165.00	.5208	.6312	.7060	47.32	24.64	.4281	572.5	.6150-02
15	9.0000	.15000-01	157.00	.8815	1.058	1.194	47.45	41.82	.4266	570.5	.1040-01
15	9.0000	.17600-01	158.00	.6706	.8122	.9080	47.48	31.84	.4262	569.9	.7914-02
15	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	9.8000	.24700-01	164.00	.4838	.5861	.6554	47.41	22.94	.4270	571.0	.5711-02
14	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	10.000	.30800-01	92.000	.5695	.6920	.7755	45.08	25.67	.4354	562.9	.6602-02
14	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	12.000	.12100-01	151.00	3.745	4.559	5.115	46.30	173.4	.4400	588.3	.4439-01
15	12.000	.17600-01	152.00	1.586	1.938	2.180	45.53	72.21	.4491	600.5	.1886-01
15	13.000	.19400-01	153.00	.9907	1.212	1.364	45.31	44.89	.4516	603.9	.1179-01
15	14.600	.44700-01	169.00	.4404	.5331	.5959	47.55	20.94	.4254	568.9	.5195-02
14	18.500	.44200-01	106.00	.4772	.5796	.6492	45.22	21.58	.4337	560.7	.5529-02
15	19.600	.62900-01	175.00	.4324	.5232	.5846	47.69	20.62	.4238	566.7	.5099-02
14	19.800	.40800-01	101.00	.6142	.7461	.8358	45.16	27.74	.4343	561.5	.7117-02
14	20.000	.24900-01	89.000	.3481	.4230	.4740	45.09	15.70	.4352	562.6	.4035-02
14	20.000	.28800-01	91.000	.4348	.5284	.5921	45.09	19.61	.4352	562.7	.5041-02
14	20.000	.32800-01	93.000	.5236	.6363	.7131	45.06	23.59	.4356	563.1	.6070-02
15	21.800	.82200-01	182.00	.3822	.4623	.5164	47.77	18.26	.4228	565.4	.4505-02
14	22.200	.62900-01	125.00	.4574	.5550	.6213	45.42	20.78	.4312	557.5	.5296-02
14	22.400	.44200-01	107.00	.4535	.5506	.6167	45.24	20.51	.4334	560.3	.5253-02
15	22.600	.10270	192.00	.3036	.3672	.4101	47.81	14.52	.4224	564.8	.3579-02
14	23.000	.42000-01	105.00	.6121	.7434	.8327	45.22	27.68	.4337	560.7	.7092-02
14	23.400	.59600-01	120.00	.5026	.6099	.6827	45.40	22.82	.4315	557.8	.5819-02
16	23.900	.21310	250.00	.1012	.1224	.1368	46.77	4.731	.4241	557.7	.1183-02
14	24.100	.82200-01	139.00	.4208	.5105	.5714	45.44	19.12	.4310	557.2	.4871-02
15	24.400	.12440	207.00	.2791	.3376	.3771	47.76	13.3[illegible]	.4230	565.6	.3290-02
16	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	24.800	.16810	223.00	.1674	.2027	.2266	46.58	7.797	.4263	560.6	.1958-02
14	24.900	.62900-01	126.00	.4568	.5542	.6204	45.44	20.76	.4310	557.2	.5288-02
15	25.000	.79500-01	178.00	.4691	.5675	.6340	47.72	22.38	.4234	566.2	.5530-02
15	25.300	.10000+00	186.00	.3894	.4709	.5259	47.82	18.62	.4223	564.7	.4589-02
15	25.300	.10270	191.00	.3276	.3961	.4424	47.82	15.66	.4222	564.6	.3861-02
14	25.500	.60700-01	124.00	.5331	.6467	.7239	45.44	24.22	.4310	557.2	.6171-02
15	26.000	.12440	206.00	.2845	.3441	.3843	47.78	13.59	.4227	565.3	.3353-02
14	26.300	.82200-01	140.00	.3869	.4693	.5252	45.50	17.60	.4303	556.3	.4478-02
15	26.700	.12100	199.00	.3783	.4574	.5108	47.85	18.10	.4219	564.2	.4458-02
16	26.800	.16810	222.00	.2019	.2444	.2732	46.65	9.416	.4255	559.5	.2361-02
16	27.000	.19040	237.00	.1573	.1903	.2126	46.80	7.363	.4236	557.1	.1839-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A016)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
16	27.100	.21310	249.00	.9508-01	.1150	.1285	46.86	4.456	.4229	556.2	.1111-02
15	27.200	.80300-01	180.00	.5027	.6081	.6793	47.76	24.01	.4229	565.5	.5926-02
15	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	27.400	.40100-01	98.000	.6437	.7817	.8756	45.23	29.12	.4335	560.5	.7458-02
15	27.400	.16480	215.00	.2133	.2577	.2878	47.95	10.23	.4207	562.6	.2512-02
14	27.600	.41600-01	102.00	.6530	.7928	.8878	45.28	29.57	.4329	559.6	.7564-02
15	27.600	.12440	205.00	.2806	.3393	.3790	47.81	13.41	.4224	564.8	.3307-02
16	27.600	.18700	230.00	.1874	.2267	.2533	46.80	8.770	.4237	557.2	.2191-02
16	27.700	.21010	243.00	.1502	.1817	.2030	46.80	7.027	.4237	557.2	.1755-02
15	27.900	.10110	188.00	.3410	.4124	.4605	47.83	16.31	.4221	564.4	.4019-02
14	28.000	.46800-01	110.00	.2546	.3091	.3462	45.29	11.53	.4328	559.5	.2949-02
16	28.200	.16810	221.00	.2376	.2876	.3215	46.68	11.09	.4251	559.0	.2779-02
15	28.300	.12200	201.00	.3688	.4460	.4981	47.82	17.53	.4222	564.6	.4346-02
16	28.300	.19040	236.00	.1214	.1468	.1640	46.86	5.686	.4230	556.3	.1418-02
14	28.400	.53500-01	114.00	.4891	.5936	.6646	45.35	22.18	.4321	558.6	.5664-02
16	28.400	.21310	248.00	.1025	.1240	.1385	46.93	4.812	.4221	555.1	.1198-02
14	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	28.800	.60400-01	121.00	.5807	.7044	.7884	45.45	26.39	.4308	556.9	.6721-02
15	28.800	.16580	217.00	.2612	.3157	.3525	47.96	12.53	.4206	562.5	.3077-02
16	28.900	.18800	232.00	.1808	.2187	.2443	46.81	8.462	.4235	556.9	.2113-02
14	29.000	.65700-01	129.00	.2304	.2795	.3129	45.46	10.48	.4307	556.8	.2667-02
16	29.000	.21110	244.00	.1259	.1523	.1702	46.87	5.904	.4228	556.0	.1472-02
14	29.200	.72400-01	133.00	.4813	.5837	.6533	45.50	21.90	.4292	556.3	.5570-02
14	29.300	.79500-01	136.00	.5529	.6704	.7501	45.57	25.20	.4294	555.1	.6397-02
14	29.600	.92500-01	143.00	.3501	.4246	.4752	45.51	15.93	.4301	556.0	.4052-02
15	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	29.900	.12100	198.00	.4057	.4904	.5476	47.93	19.44	.4210	563.0	.4780-02
15	30.200	.16480	214.00	.2610	.3154	.3521	48.02	12.54	.4199	561.5	.3074-02
16	30.200	.18700	229.00	.1924	.2328	.2600	46.87	9.020	.4228	556.0	.2249-02
16	30.300	.21010	242.00	.1641	.1985	.2217	46.92	7.699	.4223	555.3	.1918-02
14	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	31.500	.11100-01	83.000	1.268	1.543	1.730	44.78	56.76	.4390	567.6	.1471-01
14	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	31.500	.16000-01	85.000	2.164	2.644	2.974	43.90	94.99	.4496	581.3	.2520-01
14	31.500	.17600-01	86.000	1.339	1.637	1.843	43.77	58.61	.4512	583.4	.1561-01
14	31.500	.19400-01	87.000	.9218	1.128	1.269	43.69	40.27	.4523	584.7	.1075-01
16	32.100	.21010	241.00	.1687	.2039	.2277	46.96	7.919	.4218	554.7	.1970-02
15	32.200	.16480	213.00	.2250	.2718	.3034	48.09	10.82	.4191	560.4	.2650-02
16	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	32.200	.18700	228.00	.2466	.2980	.3328	47.03	11.60	.4210	553.6	.2880-02
15	32.300	.12100	197.00	.4586	.5543	.6189	47.93	21.98	.4209	562.8	.5403-02
15	32.300	.12300	194.00	.4225	.5108	.5703	47.91	20.25	.4211	563.1	.4978-02
15	32.300	.12730	208.00	.1300	.1571	.1754	48.00	6.241	.4201	561.8	.1531-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H1/HREF (R3A016)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
15	32.300	.13420	209.00	.2420	.2923	.3261	48.15	11.65	.4184	559.5	.2849-02
15	32.400	.10000+00	147.00	.3991	.7240	.8083	47.97	28.74	.4205	562.2	.7057-02
15	32.400	.10110	184.00	.5581	.6746	.7533	47.92	26.74	.4211	563.0	.6575-02
15	32.400	.10630	193.00	.1543	.1865	.2082	47.93	7.396	.4209	562.8	.1818-02
15	32.500	.85800-01	183.00	.2265	.2738	.3057	47.91	10.85	.4212	563.2	.2668-02
14	32.500	.92500-01	144.00	.3807	.4617	.5166	45.52	17.33	.4300	555.9	.4405-02
14	32.600	.79500-01	137.00	.6656	.8069	.9028	45.59	30.35	.4291	554.7	.7700-02
15	32.600	.80800-01	176.00	.6875	.8311	.9279	47.92	32.95	.4210	563.0	.8100-02
14	32.700	.67400-01	132.00	.3077	.3732	.4177	45.51	14.01	.4301	556.0	.3561-02
14	32.700	.72400-01	134.00	.4096	.4968	.5559	45.51	18.64	.4301	556.0	.4740-02
14	32.800	.65700-01	130.00	.2235	.2711	.3033	45.53	10.18	.4298	555.7	.2587-02
15	32.800	.16680	210.00	.1786	.2157	.2406	48.18	8.605	.4180	559.0	.2102-02
16	32.800	.18680	225.00	.1114	.1347	.1504	47.02	5.239	.4210	553.7	.1301-02
16	32.800	.21170	239.00	.1076	.1301	.1453	46.95	5.051	.4219	554.8	.1257-02
14	32.900	.58600-01	118.00	.5396	.6544	.7324	45.51	24.56	.4301	556.0	.6245-02
14	32.900	.60400-01	122.00	.5573	.6755	.7556	45.66	25.45	.4283	553.7	.6446-02
15	32.900	.61300-01	171.00	.4687	.5669	.6331	47.81	22.41	.4223	564.7	.5525-02
14	33.000	.53500-01	115.00	.4401	.5339	.5976	45.45	20.00	.4309	557.0	.5095-02
14	33.200	.46800-01	111.00	.2257	.2739	.3066	45.37	10.24	.4318	558.3	.2613-02
14	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	33.400	.42800-01	166.00	.6563	.7942	.8874	47.65	31.27	.4242	567.2	.7739-02
14	33.500	.40100-01	99.000	.6240	.7573	.8479	45.35	28.30	.4320	558.5	.7226-02
14	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	33.600	.38300-01	97.000	.5874	.7132	.7986	45.29	26.61	.4328	559.5	.6804-02
14	33.700	.36700-01	96.000	.6627	.8047	.9012	45.26	29.99	.4332	560.0	.7677-02
14	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	34.700	.18700	227.00	.2256	.2729	.3049	46.87	10.58	.4228	556.0	.2637-02
16	34.700	.21010	240.00	.1946	.2353	.2628	46.93	9.132	.4221	555.1	.2273-02
15	34.900	.16480	212.00	.2416	.2917	.3254	48.22	11.65	.4176	558.4	.2844-02
15	35.100	.10000+00	148.00	.6208	.7500	.8371	48.06	29.84	.4195	560.9	.7311-02
15	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	35.300	.22100-01	160.00	.2112	.2554	.2853	47.78	10.09	.4227	565.3	.2489-02
14	35.300	.92500-01	145.00	.3763	.4561	.5101	45.66	17.18	.4283	553.7	.4352-02
16	35.400	.18800	231.00	.2248	.2717	.3033	47.05	10.58	.4206	553.2	.2625-02
15	35.500	.12100	196.00	.4871	.5884	.6568	48.06	23.41	.4195	560.9	.5736-02
15	35.600	.16580	216.00	.2370	.2861	.3192	48.22	11.43	.4176	558.4	.2789-02
14	35.800	.80600-01	138.00	.6017	.7291	.8155	45.71	27.51	.4277	552.9	.6959-02
16	35.900	.21310	247.00	.1382	.1670	.1864	47.11	6.511	.4199	552.2	.1614-02
16	36.000	.19040	235.00	.1771	.2141	.2389	47.09	8.342	.4202	552.6	.2069-02
14	36.200	.72400-01	135.00	.3041	.3684	.4120	45.73	13.91	.4274	552.5	.3516-02
15	36.200	.16810	220.00	.2152	.2598	.2898	48.28	10.39	.4169	557.4	.2533-02
15	36.300	.12200	200.00	.5083	.6140	.6852	48.10	24.45	.4190	560.3	.5985-02
14	36.600	.65700-01	131.00	.3075	.3727	.4169	45.66	14.04	.4283	553.7	.3557-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H1/HREF (R3A016)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
16	36.700	.18700	226.00	.1956	.2364	.2639	47.05	9.203	.4206	553.1	.2284-02
15	36.900	.10110	187.00	.5638	.6809	.7599	48.13	27.13	.4186	559.8	.6638-02
15	36.900	.16480	211.00	.2227	.2688	.2998	48.30	10.76	.4166	557.1	.2621-02
14	37.000	.60400-01	123.00	.6571	.7962	.8904	45.73	30.05	.4274	552.6	.7598-02
15	37.000	.12440	204.00	.4395	.5308	.5923	48.13	21.15	.4186	559.7	.5174-02
14	37.100	.58600-01	119.00	.5143	.6235	.6976	45.58	23.44	.4292	554.9	.5950-02
16	37.200	.21310	246.00	.1310	.1583	.1767	47.11	6.174	.4199	552.2	.1530-02
16	37.300	.19040	234.00	.1582	.1912	.2135	47.06	7.445	.4205	553.1	.1848-02
14	37.600	.53500-01	116.00	.4448	.5392	.6032	45.61	20.29	.4289	554.5	.5145-02
15	37.600	.16810	219.00	.1902	.2295	.2560	48.28	9.181	.4168	557.4	.2238-02
15	37.800	.10270	150.00	.4484	.5416	.6043	48.13	21.58	.4186	559.7	.5279-02
15	37.900	.12100	195.00	.2900	.3504	.3910	48.08	13.95	.4192	560.5	.3415-02
15	38.000	.80300-01	179.00	.4992	.6030	.6729	48.11	24.02	.4189	560.1	.5878-02
14	38.500	.46800-01	112.00	.3085	.3742	.4187	45.53	14.05	.4299	555.8	.3570-02
15	38.600	.12440	203.00	.3642	.4399	.4909	48.11	17.52	.4188	560.0	.4288-02
15	38.700	.10000+00	185.00	.4349	.5252	.5861	48.13	20.93	.4186	559.7	.5120-02
14	38.900	.82200-01	141.00	.4820	.5838	.6527	45.81	22.08	.4264	551.3	.5571-02
14	39.300	.41600-01	104.00	.6461	.7836	.8769	45.51	29.41	.4301	556.0	.7478-02
15	39.500	.10270	190.00	.4350	.5252	.5859	48.23	20.98	.4175	558.2	.5120-02
15	39.600	.16810	218.00	.1521	.1836	.2048	48.29	7.347	.4167	557.2	.1790-02
14	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	39.900	.19040	233.00	.1172	.1417	.1581	47.07	5.516	.4205	553.0	.1369-02
15	40.100	.79500-01	177.00	.4391	.5302	.5916	48.16	21.15	.4183	559.3	.5169-02
15	40.200	.12440	202.00	.3042	.3674	.4099	48.15	14.65	.4183	559.4	.3581-02
16	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	41.100	.60700-01	173.00	.5703	.6890	.7690	48.08	27.42	.4192	560.6	.6716-02
14	41.100	.82200-01	142.00	.4507	.5459	.6103	45.82	20.65	.4264	551.2	.5210-02
15	42.300	.10270	189.00	.3141	.3792	.4230	48.23	15.15	.4174	558.1	.3696-02
15	42.600	.59600-01	172.00	.5117	.6182	.6900	48.06	24.59	.4195	560.9	.6026-02
15	43.200	.42000-01	168.00	.5421	.6553	.7318	47.89	25.96	.4215	563.6	.6387-02
15	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	43.600	.62900-01	128.00	.4905	.5941	.6642	45.81	22.47	.4265	551.4	.5670-02
14	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
14	45.000	.22900-01	8.0000	1.004	1.222	1.370	44.91	45.10	.4375	565.6	.1165-01
15	46.100	.62900-01	174.00	.5229	.6315	.7046	48.15	25.18	.4183	559.4	.6156-02
15	47.700	.40800-01	167.00	.5876	.7104	.7934	47.86	28.12	.4217	563.9	.6924-02
14	48.400	.44200-01	109.00	.6127	.7426	.8306	45.67	27.98	.4282	553.6	.7087-02
15	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	51.000	.12100-01	154.00	3.802	4.627	5.190	46.38	176.3	.4391	587.2	.4505-01
15	51.000	.17600-01	155.00	2.335	2.844	3.192	46.23	108.0	.4408	589.5	.2769-01
15	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
15	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A016)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
15	65.200	.24700-01	162.00	.7687	.9288	1.037	48.02	36.91	.4199	561.5	.9054-02
16	90.000	.91000-02	44.000	1.277	1.549	1.733	46.27	59.11	.4299	565.4	.1496-01
16	90.000	.11100-01	45.000	1.273	1.542	1.724	46.51	59.19	.4271	561.7	.1489-01
16	90.000	.13100-01	46.000	1.219	1.475	1.649	46.77	57.02	.4241	557.7	.1426-01
16	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	90.000	.17000-01	48.000	.9426	1.140	1.273	46.95	44.25	.4219	554.8	.1101-01
16	90.000	.20900-01	50.000	.8233	.9951	1.111	47.06	38.74	.4206	553.1	.9616-02
16	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	90.000	.26900-01	53.000	.6886	.8317	.9282	47.20	32.50	.4189	550.9	.8038-02
16	90.000	.28800-01	54.000	.6695	.8086	.9024	47.20	31.60	.4188	550.8	.7815-02
16	90.000	.32800-01	55.000	.3481	.4203	.4689	47.28	16.46	.4179	549.6	.4062-02
16	90.000	.36700-01	56.000	.5385	.6504	.7258	47.22	25.43	.4187	550.6	.6286-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	135.00	.19000-01	49.000	.8664	1.047	1.168	47.15	40.85	.4195	551.6	.1012-01
16	135.00	.22900-01	51.000	.7554	.9122	1.018	47.24	35.69	.4184	550.2	.8816-02
16	180.00	.91000-02	23.000	.4282	.5198	.5820	46.06	19.72	.4324	568.7	.5020-02
16	180.00	.11100-01	24.000	1.200	1.452	1.623	46.66	55.97	.4254	559.4	.1403-01
16	180.00	.13100-01	25.000	1.021	1.235	1.380	46.93	47.94	.4221	555.1	.1193-01
16	180.00	.15000-01	26.000	.9814	1.186	1.325	47.02	46.15	.4210	553.7	.1146-01
16	180.00	.17000-01	27.000	.9076	1.097	1.224	47.13	42.77	.4197	552.0	.1060-01
16	180.00	.19000-01	28.000	.8515	1.029	1.148	47.17	40.17	.4192	551.3	.9940-02
16	180.00	.20900-01	29.000	.7974	.9631	1.075	47.22	37.66	.4186	550.5	.9307-02
16	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	180.00	.28800-01	32.000	.6317	.7629	.8512	47.24	29.84	.4184	550.2	.7373-02
16	180.00	.32800-01	33.000	.5521	.6668	.7441	47.22	26.07	.4187	550.6	.6444-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	225.00	.22900-01	30.000	.7323	.8846	.9871	47.20	34.57	.4188	550.8	.8549-02
16	270.00	.91000-02	63.000	.4106	.4979	.5571	46.30	19.01	.4296	565.0	.4809-02
16	270.00	.11100-01	64.000	.7494	.9082	1.016	46.44	34.80	.4280	562.9	.8773-02

(R3A016)

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H1/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
16	270.00	.13100-01	65.000	1.167	1.413	1.579	46.64	54.42	.4256	559.7	.1365-01
16	270.00	.17000-01	67.000	.8424	1.019	1.138	46.86	39.47	.4230	556.3	.9846-02
16	270.00	.20900-01	69.000	.7784	.9412	1.051	46.95	36.54	.4219	554.9	.9094-02
16	270.00	.24900-01	71.000	.7276	.8797	.9823	46.98	34.18	.4216	554.4	.8500-02
16	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	315.00	.15000-01	66.000	.9186	1.113	1.244	46.51	42.72	.4272	561.8	.1075-01
16	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	315.00	.22900-01	70.000	.7379	.8936	.9990	46.59	34.38	.4262	560.5	.8632-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A0:7)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = 9.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
17	.0000	9.000	5.300	.5116+07	406.0	1284.	313.3	.5360	197.3	.2280-03	3649.	.2750-01
18	.0000	9.000	5.300	.4940+07	404.9	1310.	320.0	.5338	201.5	.2223-03	3688.	.2750-01
19	.0000	9.000	5.300	.4897+07	405.2	1318.	322.1	.5340	202.8	.2209-03	3700.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
17	.0000	.2575
18	.0000	.2575
19	.0000	.2578

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT -	TW DEG. R	STN NO R=0.9
19	.00000	.91000-02	1.0000	.8829	1.070	1.196	47.45	41.89	.4276	573.9	.1047-01
19	.00000	.11100-01	2.0000	1.154	1.397	1.562	47.69	55.05	.4247	570.1	.1368-01
19	.00000	.13100-01	3.0000	.3954	.4771	.5320	48.46	19.16	.4158	558.1	.4672-02
19	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	.00000	.17000-01	5.0000	.8318	1.005	1.123	48.03	39.96	.4208	564.8	.9843-02
19	.00000	.19000-01	6.0000	.7688	.9292	1.037	48.04	36.93	.4207	564.7	.9097-02
19	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	.00000	.24900-01	9.0000	.6527	.7889	.8807	48.05	31.37	.4205	564.4	.7724-02
19	.00000	.26900-01	10.000	.5875	.7101	.7928	48.04	28.22	.4207	564.7	.6952-02
19	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	.00000	.32800-01	12.000	.5310	.6460	.7244	45.27	24.04	.4381	572.1	.6206-02
17	.00000	.36700-01	13.000	.5057	.6148	.6892	45.39	22.95	.4366	570.1	.5907-02
17	.00000	.40600-01	14.000	.5579	.6785	.7607	45.33	25.29	.4374	571.1	.6519-02
17	.00000	.48500-01	15.000	.4338	.5274	.5912	45.41	19.70	.4364	569.8	.5068-02
17	.00000	.56400-01	16.000	.3860	.4693	.5260	45.39	17.52	.4366	570.1	.4509-02
17	.00000	.76100-01	17.000	.2602	.3163	.3545	45.43	11.82	.4362	569.6	.3039-02
17	.00000	.95800-01	18.000	.2144	.2607	.2922	45.41	9.736	.4365	569.9	.2505-02
17	.00000	.11550	19.000	.2110	.2568	.2881	45.16	9.529	.4394	573.7	.2467-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A017)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
17	.00000	.16480	20.000	.1122	.1365	.1530	45.33	5.087	.4374	571.1	.1311-02
17	.00000	.18450	21.000	.1018	.1238	.1388	45.36	4.619	.4370	570.7	.1190-02
17	.00000	.21400	22.000	.6788-01	.8249-01	.9244-01	45.50	3.089	.4353	568.4	.7926-03
18	2.0000	.24700-01	165.00	.5100	.6186	.6923	46.88	23.91	.4303	573.8	.6032-02
18	9.0000	.15000-01	157.00	.8281	1.004	1.123	46.97	38.90	.4292	572.4	.9791-02
18	9.0000	.17600-01	158.00	.6358	.7707	.8621	47.02	29.89	.4287	571 7	.7515-02
18	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	9.8000	.24700-01	164.00	.4697	.5694	.6371	46.98	22.06	.4292	572.4	.5553-02
19	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	10.000	.30800-01	92.000	.5290	.6395	.7141	48.00	25.40	.4211	565.2	.6261-02
19	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	12.000	.12100-01	151.00	4.385	5.336	5.986	46.13	202.3	.4392	585.7	.5201-01
18	12.000	.17600-01	152.00	1.563	1.907	2.143	45.54	71.16	.4461	595.0	.1858-01
18	13.000	.19400-01	153.00	1.051	1.284	1.444	45.33	47.63	.4486	598.3	.1250-01
18	14.600	.44200-01	169.00	.4260	.5163	.5775	47.05	20.04	.4283	571.3	.5035-02
19	18.500	.44200-01	106.00	.4622	.5584	.6233	48.15	22.25	.4194	563.0	.5467-02
18	19.600	.62900-01	175.00	.5079	.6153	.6881	47.13	23.94	.4274	570.0	.6001-02
19	19.800	.40800-01	101.00	.5748	.6946	.7754	48.09	27.64	.4202	563.9	.6801-02
19	20.000	.24900-01	89.000	.3256	.3935	.4392	48.07	15.65	.4203	564.1	.3852-02
19	20.000	.28800-01	91.000	.4290	.5185	.5789	48.04	20.61	.4207	564.7	.5077-02
19	20.000	.32800-01	93.000	.5637	.6814	.7608	48.01	27.06	.4211	565.2	.6671-02
18	21.800	.82200-01	182.00	.4523	.5480	.6129	47.13	21.32	.4273	569.9	.5345-02
19	22.200	.62900-01	125.00	.5682	.6858	.7651	48.34	27.47	.4171	559.9	.6716-02
19	22.400	.44200-01	107.00	.4388	.5300	.5915	48.19	21.14	.4190	562.4	.5190-02
18	22.600	.10270	192.00	.3591	.4351	.4866	47.14	16.93	.4273	569.9	.4244-02
19	23.000	.42000-01	105.00	.5489	.6631	.7401	48.15	26.43	.4194	563.0	.6493-02
19	23.400	.59600-01	120.00	.6465	.7805	.8708	48.30	31.22	.4177	560.6	.7643-02
17	23.900	.21310	250.00	.1137	.1381	.1547	45.57	5.181	.4345	567.3	.1327-02
19	24.100	.82200-01	139.00	.5136	.6201	.6918	48.30	24.81	.4176	560.6	.6072-02
18	24.400	.12440	207.00	.3040	.3687	.4126	46.90	14.26	.4301	573.6	.3596-02
17	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	24.800	.16810	223.00	.1963	.2386	.2675	45.39	8.910	.4366	570.1	.2293-02
19	24.900	.62900-01	126.00	.5553	.6703	.7477	48.35	26.85	.4171	559.8	.6564-02
18	25.000	.79500-01	178.00	.5628	.6818	.7624	47.14	26.53	.4273	569.9	.6649-02
18	25.300	.10000+00	186.00	.4594	.5565	.6223	47.14	21.65	.4272	569.8	.5428-02
18	25.300	.10270	191.00	.3866	.4683	.5236	47.21	18.25	.4265	568.8	.4567-02
19	25.500	.60700-01	124.00	.6812	.8222	.9171	48.37	32.95	.4169	559.5	.8052-02
18	26.000	.12440	206.00	.3180	.3857	.4316	46.92	14.92	.4298	573.2	.3761-02
19	26.300	.80700-01	140.00	.4609	.5587	.6232	48.35	22.38	.4170	559.7	.5471-02
18	26.700	.12100	199.00	.4168	.5052	.5651	47.05	19.61	.4283	571.3	.4926-02
17	26.800	.16810	222.00	.2066	.2511	.2814	45.43	9.383	.4362	569.5	.2413-02
17	27.000	.19040	237.00	.1634	.1984	.2223	45.61	7.451	.4340	566.7	.1907-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A017)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
17	27.100	.21310	249.00	.1136	.1379	.1544	45.68	5.188	.4331	565.5	.1325-02
18	27.200	.80300-01	180.00	.6490	.7861	.8791	47.17	30.61	.4270	569.4	.7667-02
18	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	27.400	.40100-01	98.000	.6238	.7535	.8409	48.18	30.05	.4191	562.5	.7378-02
18	27.400	.16480	215.00	.2336	.2831	.3167	47.06	10.99	.4282	571.0	.2761-02
19	27.600	.41600-01	102.00	.6333	.7649	.8535	48.22	30.54	.4186	561.8	.7490-02
18	27.600	.12440	205.00	.3063	.3714	.4155	46.98	14.39	.4292	572.4	.3622-02
17	27.600	.18700	230.00	.1997	.2426	.2718	45.61	9.111	.4340	566.7	.2331-02
17	27.700	.21010	243.00	.1534	.1936	.2169	45.62	7.272	.4339	566.5	.1860-02
18	27.900	.10110	188.00	.3923	.4752	.5314	47.17	18.50	.4269	569.4	.4635-02
19	28.000	.46800-01	110.00	.2677	.3233	.3608	48.22	12.91	.4186	561.8	.3166-02
17	28.200	.16810	221.00	.2077	.2524	.2828	45.48	9.445	.4356	568.7	.2425-02
18	28.300	.12200	201.00	.4044	.4903	.5485	47.01	19.01	.4287	571.8	.4781-02
17	28.300	.19040	236.00	.1233	.1498	.1677	45.64	5.629	.4336	566.1	.1439-02
19	28.400	.53500-01	114.00	.5549	.6700	.7476	48.27	26.78	.4180	561.1	.6561-02
17	28.400	.21310	248.00	.1032	.1253	.1403	45.72	4.717	.4327	564.9	.1204-02
19	28.700	.58600-01	117.00	.6732	.8127	.9067	48.31	32.52	.4175	560.4	.7958-02
19	28.800	.60400-01	121.00	.7188	.8675	.9676	48.38	34.78	.4167	559.3	.8496-02
18	28.800	.16580	217.00	.2364	.2864	.3203	47.12	11.14	.4275	570.1	.2793-02
17	28.900	.18800	232.00	.1827	.2219	.2486	45.61	8.333	.4340	566.7	.2132-02
19	29.000	.65700-01	129.00	.2794	.3372	.3761	48.39	13.52	.4166	559.2	.3302-02
17	29.000	.21110	244.00	.1265	.1536	.1720	45.70	5.782	.4329	565.3	.1476-02
19	29.200	.72400-01	133.00	.6188	.7469	.8332	48.35	29.92	.4170	559.7	.7314-02
19	29.300	.79500-01	136.00	.7147	.8625	.9618	48.43	34.62	.4161	558.5	.8446-02
19	29.600	.92500-01	143.00	.4384	.5292	.5904	48.30	21.17	.4176	560.6	.5182-02
18	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	29.900	.12100	198.00	.4407	.5339	.5971	47.12	20.76	.4275	570.1	.5207-02
18	30.200	.16480	214.00	.2386	.2890	.3232	47.14	11.25	.4272	569.8	.2819-02
17	30.200	.18700	229.00	.1963	.2383	.2669	45.66	8.961	.4334	565.9	.2290-02
17	30.300	.21010	242.00	.1581	.1920	.2150	45.70	7.226	.4329	565.3	.1845-02
19	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	31.500	.11100-01	83.000	1.418	1.716	1.918	47.70	67.64	.4246	569.9	.1680-01
19	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	31.500	.16000-01	85.000	2.529	3.070	3.437	47.07	119.1	.4321	579.9	.3004-01
19	31.500	.17600-01	86.000	1.544	1.875	2.100	46.93	72.48	.4336	582.0	.1835-01
19	31.500	.19400-01	87.000	1.081	1.313	1.471	46.85	50.64	.4346	583.4	.1285-01
17	32.100	.21010	241.00	.1967	.2387	.2673	45.75	8.997	.4323	564.5	.2294-02
18	32.200	.16480	213.00	.2478	.3002	.3356	47.19	11.69	.4266	569.0	.2927-02
17	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	32.200	.18700	228.00	.3126	.3793	.4246	45.83	14.33	.4313	563.2	.3645-02
18	32.300	.12100	197.00	.5067	.6139	.6865	47.13	23.88	.4274	569.9	.5987-02
18	32.300	.12300	194.00	.4675	.5664	.6334	47.12	22.03	.4275	570.1	.5524-02
18	32.300	.12730	208.00	.1409	.1707	.1909	47.08	6.632	.4280	570.8	.1665-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H1/HREF (R3A017)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
18	32.300	.13420	209.00	.2716	.3291	.3682	47.06	12.78	.4282	571.0	.3210-02
18	32.400	.10000+00	147.00	.7225	.8747	.9778	47.28	34.16	.4256	567.6	.8532-02
18	32.400	.10110	184.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	32.400	.10630	193.00	.1678	.2031	.2271	47.27	7.929	.4257	567.8	.1981-02
18	32.500	.85800-01	183.00	.2593	.3140	.3510	47.27	12.26	.4257	567.8	.3063-02
19	32.500	.92500-01	144.00	.4621	.5578	.6223	48.32	22.33	.4174	560.2	.5462-02
19	32.600	.79500-01	137.00	.9610	1.159	1.293	48.46	46.56	.4158	558.1	.1135-01
18	32.600	.80800-01	176.00	.9993	1.210	1.352	47.30	47.27	.4254	567.4	.1180-01
19	32.700	.67400-01	132.00	.3881	.4684	.5225	48.37	18.77	.4168	559.5	.4587-02
19	32.700	.72400-01	134.00	.5168	.6238	.6958	48.37	25.00	.4168	559.5	.6108-02
19	32.800	.65700-01	130.00	.2821	.3403	.3795	48.44	13.66	.4160	558.4	.3333-02
18	32.800	.16680	210.00	.2082	.2521	.2817	47.30	9.848	.4254	567.3	.2459-02
17	32.800	.18880	225.00	.1591	.1931	.2162	45.78	7.234	.4320	564.0	.1856-02
17	32.800	.21170	239.00	.1542	.1871	.2095	45.77	7.056	.4321	564.2	.1798-02
19	32.900	.58600-01	118.00	.5922	.7147	.7972	48.38	28.65	.4167	559.4	.6999-02
19	32.900	.60400-01	122.00	.7345	.8858	.9875	48.58	35.68	.4144	556.3	.8675-02
18	32.900	.61300-01	171.00	.5946	.7199	.8047	47.29	28.12	.4255	567.5	.7022-02
19	33.000	.53500-01	115.00	.4815	.5812	.6483	48.37	23.29	.4169	559.5	.5692-02
19	33.200	.46800-01	111.00	.2310	.2788	.3110	48.35	11.17	.4170	559.7	.2731-02
19	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	33.400	.42800-01	166.00	.6206	.7519	.8408	47.15	29.26	.4272	569.7	.7333-02
19	33.500	.40100-01	99.000	.6552	.7911	.8826	48.29	31.64	.4178	560.8	.7747-02
19	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	33.600	.38300-01	97.000	.6345	.7663	.8551	48.22	30.60	.4186	561.8	.7503-02
19	33.700	.36700-01	96.000	.6475	.7821	.8728	48.18	31.20	.4190	562.4	.7658-02
19	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	34.700	.18700	227.00	.2679	.3253	.3643	45.68	12.24	.4331	565.5	.3126-02
17	34.700	.21010	240.00	.2522	.3061	.3427	45.77	11.54	.4321	564.2	.2942-02
18	34.900	.16480	212.00	.2820	.3414	.3816	47.28	13.33	.4256	567.6	.3330-02
18	35.100	.10000+00	148.00	.7846	.9498	1.062	47.34	37.15	.4249	566.7	.9264-02
18	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	35.300	.22100-01	160.00	.2414	.2923	.3268	47.26	11.41	.4258	567.9	.2851-02
19	35.300	.92500-01	145.00	.4619	.5573	.6216	48.44	22.38	.4160	558.4	.5458-02
17	35.400	.18800	231.00	.2834	.3438	.3848	45.86	13.00	.4310	562.7	.3304-02
18	35.500	.12100	196.00	.5631	.6821	.7626	47.20	26.58	.4265	568.8	.6652-02
18	35.600	.16580	216.00	.2771	.3355	.3750	47.30	13.11	.4254	567.4	.3272-02
19	35.800	.80600-01	138.00	.8936	1.078	1.201	48.56	43.39	.4146	556.5	.1055-01
17	35.900	.21310	247.00	.1793	.2174	.2433	45.94	8.235	.4301	561.5	.2090-02
17	36.000	.19040	235.00	.2275	.2759	.3088	45.89	10.44	.4306	562.2	.2652-02
19	36.200	.72400-01	135.00	.3758	.4531	.5051	48.59	18.26	.4143	556.0	.4438-02
18	36.200	.16810	220.00	.2454	.2971	.3320	47.36	11.62	.4246	566.3	.2898-02
18	36.300	.12200	200.00	.5995	.7260	.8117	47.23	28.31	.4262	568.4	.7081-02
19	36.600	.65700-01	131.00	.3939	.4752	.5298	48.51	19.11	.4151	557.2	.4653-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A017)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
17	36.700	.18700	226.00	.2179	.2643	.2958	45.87	9.994	.4308	562.5	.2540-02
18	36.900	.10110	187.00	.7012	.8485	.9481	47.41	33.25	.4240	565.5	.8277-02
18	36.900	.16480	211.00	.2282	.2762	.3087	47.34	10.80	.4249	566.7	.2694-02
19	37.000	.60400-01	123.00	.9205	1.110	1.237	48.64	44.77	.4137	555.3	.1087-01
18	37.000	.12440	204.00	.5207	.6306	.7051	47.21	24.58	.4264	568.7	.6151-02
19	37.100	.58600-01	119.00	.6390	.7709	.8597	48.46	30.96	.4158	558.1	.7550-02
17	37.200	.21310	246.00	.1458	.1769	.1979	45.94	6.699	.4301	561.5	.1700-02
17	37.300	.19040	234.00	.1840	.2232	.2498	45.89	8.441	.4307	562.4	.2145-02
19	37.600	.53500-01	116.00	.5001	.6033	.6727	48.50	24.26	.4153	557.5	.5909-02
18	37.600	.16810	219.00	.1960	.2373	.2652	47.34	9.280	.4249	566.7	.2315-02
18	37.800	.10270	190.00	.5248	.6352	.7099	47.35	24.85	.4248	566.5	.6196-02
18	37.900	.12100	195.00	.3034	.3674	.4108	47.22	14.32	.4264	568.6	.3583-02
18	38.000	.80300-01	179.00	.6311	.7636	.8532	47.45	29.35	.4236	565.0	.7449-02
19	38.500	.46800-01	112.00	.3329	.4017	.4479	48.46	16.13	.4157	558.0	.3933-02
18	38.600	.12440	203.00	.4154	.5031	.5625	47.20	19.60	.4266	568.9	.4907-02
18	38.700	.10000+00	185.00	.4358	.6001	.6706	47.35	23.48	.4248	566.5	.5853-02
19	38.900	.82200-01	141.00	.5815	.7011	.7815	48.64	28.28	.4137	555.3	.6867-02
19	39.300	.41600-01	104.00	.6514	.7860	.8767	48.41	31.54	.4163	558.8	.7698-02
18	39.500	.10270	190.00	.4935	.5971	.6671	47.45	23.42	.4236	564.9	.5825-02
18	39.600	.16810	218.00	.1447	.1752	.1958	47.34	6.850	.4249	566.7	.1709-02
19	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	39.900	.19040	233.00	.1174	.1424	.1593	45.91	5.389	.4304	562.0	.1368-02
18	40.100	.79500-01	177.00	.5042	.6101	.6817	47.44	23.92	.4238	565.2	.5951-02
18	40.200	.12440	202.00	.3242	.3927	.4391	47.19	15.30	.4266	569.0	.3830-02
17	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	41.100	.60700-01	173.00	.7689	.9303	1.039	47.45	36.48	.4236	564.9	.9075-02
19	41.100	.82200-01	142.00	.5244	.6322	.7047	48.64	25.50	.4137	555.3	.6192-02
18	42.300	.10270	189.00	.3204	.3877	.4332	47.43	15.20	.4238	565.2	.3782-02
18	42.600	.59600-01	172.00	.6203	.7506	.8387	47.41	29.41	.4241	565.6	.7322-02
18	43.200	.42000-01	168.00	.5709	.6911	.7723	47.35	27.03	.4248	566.5	.6741-02
18	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	43.600	.62900-01	128.00	.5701	.6873	.7660	48.66	27.74	.4135	555.0	.6732-02
19	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	45.000	.22900-01	8.0000	.9600	1.161	1.297	47.84	45.92	.4231	567.9	.1137-01
18	46.100	.62900-01	174.00	.6081	.7356	.8218	47.48	28.87	.4233	564.5	.7176-02
18	47.700	.40800-01	167.00	.6381	.7726	.8635	47.30	30.19	.4253	567.2	.7535-02
19	48.400	.44200-01	109.00	.6248	.7536	.8402	48.53	30.32	.4150	557.0	.7381-02
18	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	51.000	.12100-01	154.00	4.799	5.838	6.547	46.21	221.8	.4382	584.4	.5690-01
18	51.000	.17600-01	155.00	2.712	3.299	3.700	46.20	125.3	.4383	584.5	.3216-01
18	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
18	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A017)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
18	65.200	.24700-01	162.00	.8047	.9739	1.088	47.38	38.12	.4245	566.1	.9500-02
17	90.000	.91000-02	44.000	1.481	1.803	2.024	44.99	66.62	.4414	576.4	.1732-01
17	90.000	.11100-01	45.000	1.523	1.853	2.078	45.26	68.95	.4382	572.1	.1780-01
17	90.000	.13100-01	46.000	1.393	1.693	1.897	45.48	63.36	.4355	568.7	.1627-01
17	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	90.000	.17000-01	48.000	.9793	1.189	1.332	45.70	44.75	.4329	565.3	.1143-01
17	90.000	.20900-01	50.000	.8601	1.044	1.168	45.83	39.42	.4313	563.2	.1003-01
17	90.000	.24900-01	52.000	.6940	.8399	.9386	46.42	32.22	.4242	553.9	.8076-02
17	90.000	.26900-01	53.000	.7390	.8959	1.002	46.00	34.00	.4293	560.5	.8612-02
17	90.000	.28800-01	54.000	.7181	.8706	.9740	46.03	33.06	.4290	560.1	.8368-02
17	90.000	.32800-01	55.000	.3968	.4808	.5377	46.13	18.30	.4277	558.4	.4621-02
17	90.000	.36700-01	56.000	.5730	.6946	.7769	46.07	26.40	.4284	559.4	.6676-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	135.00	.19000-01	49.000	.8617	1.045	1.170	45.92	39.57	.4303	561.8	.1005-01
17	135.00	.22900-01	51.000	.7841	.9505	1.063	46.05	36.11	.4287	559.7	.9137-02
17	180.00	.91000-02	23.000	.5372	.6548	.7354	44.82	24.08	.4435	579.1	.6290-02
17	180.00	.11100-01	24.000	1.056	1.284	1.440	45.41	47.97	.4364	569.9	.1234-01
17	180.00	.13100-01	25.000	.9620	1.168	1.308	45.68	43.95	.4331	565.5	.1122-01
17	180.00	.15000-01	26.000	.9471	1.150	1.287	45.76	43.34	.4322	564.3	.1105-01
17	180.00	.17000-01	27.000	.8844	1.073	1.200	45.95	40.63	.4300	561.4	.1031-01
17	180.00	.19000-01	28.000	.8360	1.014	1.134	45.97	38.43	.4297	561.0	.9744-02
17	180.00	.20900-01	29.000	.7674	.9303	1.041	46.01	35.31	.4291	560.3	.8942-02
17	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	180.00	.28800-01	32.000	.5960	.7224	.8081	46.05	27.44	.4287	559.7	.6944-02
17	180.00	.32800-01	33.000	.5403	.6550	.7327	46.03	24.87	.4289	560.1	.6296-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	225.00	.22900-01	30.000	.6897	.8362	.9356	46.00	31.73	.4293	560.6	.8038-02
17	270.00	.91000-02	63.000	.4312	.5251	.5892	45.05	19.42	.4408	575.6	.5044-02
17	270.00	.11100-01	64.000	.6514	.7927	.8892	45.19	29.43	.4391	573.4	.7616-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A017)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
17	270.00	.13100-01	65.000	.9930	1.207	1.353	45.39	45.07	.4366	570.1	.1160-01
17	270.00	.17000-01	67.000	.8183	.9939	1.113	45.62	37.33	.4339	566.6	.9551-02
17	270.00	.20900-01	69.000	.7304	.8867	.9929	45.71	33.39	.4328	565.1	.8521-02
17	270.00	.24900-01	71.000	.6769	.8215	.9197	45.78	30.99	.4320	564.0	.7895-02
17	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	315.00	.15000-01	66.000	.8625	1.049	1.177	45.27	39.04	.4381	572.0	.1008-01
17	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
17	315.00	.22900-01	70.000	.6902	.8391	.9406	45.39	31.33	.4366	570.1	.8062-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A023)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
8	5.000	.0000	5.300	.5067+07	406.0	1291.	315.3	.5358	198.5	.2264-03	3660.	.2750-01
9	5.000	.0000	5.300	.5070+07	406.3	1291.	315.3	.5361	198.5	.2266-03	3660.	.2750-01
10	5.000	.0000	5.300	.4871+07	406.4	1324.	323.8	.5353	203.9	.2203-03	3710.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
8	.0000	.2576
9	.0000	.2577
10	.0000	.2582

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
8	.00000	.91000-02	1.0000	.4627	.5622	.6300	45.80	21.19	.4352	571.9	.5424-02
8	.00000	.11100-01	2.0000	1.146	1.391	1.557	46.08	52.80	.4319	567.5	.1342-01
8	.00000	.13100-01	3.0000	.3357	.4068	.4549	46.46	15.60	.4274	561.6	.3926-02
8	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	.00000	.17000-01	5.0000	.8676	1.050	1.174	46.66	40.49	.4250	558.4	.1014-01
8	.00000	.19000-01	6.0000	.8510	1.030	1.151	46.74	39.77	.4241	557.2	.9940-02
8	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	.00000	.24900-01	9.0000	.7268	.8791	.9821	46.83	34.04	.4229	555.7	.8487-02
8	.00000	.26900-01	10.000	.6462	.7817	.8733	46.82	30.26	.4231	555.9	.7546-02
8	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	.00000	.32800-01	12.000	.5568	.6717	.7490	48.83	27.19	.4154	560.6	.6591-02
10	.00000	.36700-01	13.000	.5270	.6356	.7086	48.88	25.76	.4148	559.8	.6237-02
10	.00000	.40600-01	14.000	.5597	.6752	.7529	48.84	27.34	.4154	560.6	.6625-02
10	.00000	.48500-01	15.000	.5239	.6319	.7045	48.89	25.62	.4148	559.7	.6201-02
10	.00000	.56400-01	16.000	.5033	.6072	.6770	48.85	24.59	.4153	560.4	.5957-02
10	.00000	.76100-01	17.000	.3429	.4137	.4614	48.79	16.73	.4159	561.3	.4059-02
10	.00000	.95800-01	18.000	.2561	3093	.3450	48.63	12.46	.4178	563.9	.3034-02
10	.00000	.11550	19.000	.1964	.2372	.2647	48.54	9.535	.4188	565.2	.2327-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A023)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
10	.00000	.16480	20.000	.9574-01	.1157	.1292	48.40	4.634	.4204	567.4	.1135-02
10	.00000	.18450	21.000	.7076-01	.8543-01	.9531-01	48.65	3.443	.4175	563.5	.8381-03
10	.00000	.21400	22.000	.4088-01	.4932-01	.5500-01	48.82	1.996	.4156	560.9	.4840-03
9	2.0000	.24700-01	165.00	.5619	.6786	.7572	47.24	26.55	.4183	549.6	.6550-02
9	9.0000	.15000-01	157.00	.8447	1.021	1.139	47.14	39.82	.4196	551.3	.9850-02
9	9.0000	.17600-01	158.00	.6696	.8084	.9020	47.28	31.65	.4179	549.1	.7804-02
9	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	9.8000	.24700-01	164.00	.5051	.6101	.6809	47.19	23.84	.4189	550.4	.5889-02
8	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	10.000	.30800-01	92.000	.5373	.6502	.7266	46.74	25.12	.4241	557.2	.6276-02
8	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	12.000	.12100-01	151.00	3.186	3.865	4.327	46.17	147.1	.4311	566.5	.3728-01
9	12.000	.17600-01	152.00	1.446	1.757	1.968	45.95	66.46	.4337	569.9	.1694-01
9	13.000	.19400-01	153.00	.9018	1.096	1.227	45.88	41.38	.4345	570.9	.1057-01
9	14.600	.44200-01	169.00	.4775	.5765	.6433	47.26	22.57	.4180	549.3	.5565-02
8	18.500	.44200-01	106.00	.4869	.5892	.6584	46.72	22.75	.4242	557.4	.5688-02
9	19.600	.62900-01	175.00	.3031	.3661	.4085	47.24	14.32	.4183	549.6	.3534-02
8	19.800	.40800-01	101.00	.5486	.6641	.7423	46.65	25.59	.4251	558.6	.6410-02
8	20.000	.24900-01	89.000	.3302	.3997	.4468	46.63	15.40	.4253	558.8	.3858-02
8	20.000	.28800-01	91.000	.3743	.4531	.5065	46.61	17.45	.4256	559.2	.4374-02
8	20.000	.32800-01	93.000	.4479	.5423	.6062	46.61	20.88	.4256	559.2	.5235-02
9	21.800	.82200-01	182.00	.2576	.3111	.3471	47.28	12.18	.4179	549.1	.3003-02
8	22.200	.62900-01	125.00	.3393	.4105	.4586	46.81	15.89	.4232	556.0	.3963-02
8	22.400	.44200-01	107.00	.4196	.5079	.5676	46.68	19.59	.4247	558.1	.4902-02
9	22.600	.10270	192.00	.2056	.2482	.2770	47.27	9.717	.4180	549.2	.2396-02
8	23.000	.42000-01	105.00	.5318	.6437	.7195	46.65	24.81	.4251	558.6	.6213-02
8	23.400	.59600-01	120.00	.3884	.4700	.5252	46.75	18.16	.4240	557.1	.4537-02
10	23.900	.21310	250.00	.5113-01	.6169-01	.6879-01	48.82	2.496	.4156	560.9	.6053-03
8	24.100	.82200-01	139.00	.3040	.3679	.4110	46.74	14.21	.4241	557.2	.3551-02
9	24.400	.12440	207.00	.1805	.2180	.2434	47.13	8.505	.4196	551.4	.2105-02
10	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	24.800	.16810	223.00	.1025	.1238	.1381	48.68	4.991	.4173	563.1	.1214-02
8	24.900	.62900-01	126.00	.3416	.4133	.4618	46.77	15.98	.4237	556.7	.3989-02
9	25.000	.79500-01	178.00	.3098	.3741	.4175	47.21	14.62	.4187	550.1	.3611-02
9	25.300	.10000+00	186.00	.2722	.3288	.3669	47.21	12.65	.4187	550.2	.3174-02
9	25.300	.10270	191.00	.2275	.2748	.3066	47.22	10.74	.4185	549.9	.2652-02
8	25.500	.60700-01	124.00	.3957	.4788	.5350	46.75	18.50	.4240	557.1	.4622-02
9	26.000	.12440	206.00	.1892	.2286	.2552	47.11	8.913	.4198	551.6	.2206-02
8	26.300	.82200-01	140.00	.2912	.3525	.3938	46.72	13.61	.4242	557.4	.3402-02
9	26.700	.12100	199.00	.2505	.3051	.3406	47.11	11.90	.4198	551.6	.2945-02
10	26.800	.16810	222.00	.1323	.1597	.1782	48.62	6.430	.4179	564.0	.1567-02
10	27.000	.19040	237.00	.1103	.1331	.1484	48.77	5.377	.4162	561.7	.1306-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A023)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
10	27.100	.21310	249.00	.6379-01	.7694-01	.8578-01	48.89	3.119	.4147	559.7	.7549-03
9	27.200	.80300-01	180.00	.3600	.4348	.4852	47.19	16.99	.4189	550.4	.4197-02
9	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	27.400	.40100-01	98.000	.5401	.6540	.7311	46.59	25.16	.4258	559.5	.6312-02
9	27.400	.16480	215.00	.1394	.1684	.1879	47.20	6.581	.4188	550.2	.1625-02
8	27.600	.41600-01	102.00	.5607	.6789	.7590	46.58	26.11	.4260	559.7	.6553-02
9	27.600	.12440	205.00	.1910	.2307	.2576	47.10	8.994	.4200	551.8	.2227-02
10	27.600	.18700	230.00	.1204	.1453	.1621	48.72	5.867	.4168	562.4	.1426-02
10	27.700	.21010	243.00	.9635-01	.1163	.1297	48.78	4.700	.4161	561.5	.1141-02
9	27.900	.10110	188.00	.2488	.3005	.3354	47.18	11.74	.4191	550.6	.2901-02
8	28.000	.46800-01	110.00	.2160	.2615	.2924	46.59	10.06	.4258	559.5	.2524-02
10	28.200	.16810	221.00	.1707	.2061	.2300	48.61	8.298	.4180	564.1	.2022-02
9	28.300	.12200	201.00	.2311	.2792	.3116	47.15	10.30	.4194	551.1	.2695-02
10	28.300	.19040	236.00	.9508-01	.1148	.1280	48.71	4.631	.4169	562.6	.1126-02
8	28.400	.53500-01	114.00	.3503	.4241	.4740	46.63	16.33	.4254	558.9	.4093-02
10	28.400	.21310	248.00	.7338-01	.9457-01	.1055	48.82	3.827	.4156	560.9	.9279-03
8	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	28.800	.60400-01	121.00	.4249	.5143	.5748	46.68	19.84	.4247	558.1	.4964-02
9	28.800	.16580	217.00	.1920	.2319	.2588	47.17	9.056	.4192	550.8	.2239-02
10	28.900	.18800	232.00	.1308	.1579	.1761	48.69	6.367	.4171	563.0	.1549-02
8	29.000	.65700-01	129.00	.1898	.2297	.2567	46.68	8.858	.4248	558.1	.2217-02
10	29.000	.21110	244.00	.9380-01	.1132	.1262	48.76	4.574	.4162	561.7	.1111-02
8	29.200	.72400-01	133.00	.3209	.3885	.4343	46.62	14.96	.4254	559.0	.3750-02
8	29.300	.79500-01	136.00	.4134	.5004	.5592	46.68	19.29	.4248	558.2	.4830-02
8	29.600	.92500-01	143.00	.2687	.3254	.3638	46.59	12.52	.4258	559.5	.3141-02
9	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	29.900	.12100	198.00	.2771	.3348	.3737	47.11	13.05	.4198	551.6	.3231-02
9	30.200	.16480	214.00	.1990	.2404	.2683	47.13	9.378	.4196	551.4	.2320-02
10	30.200	.18700	229.00	.1378	.1664	.1856	48.67	6.709	.4173	563.2	.1632-02
10	30.300	.21010	242.00	.1085	.1310	.1461	48.69	5.283	.4171	562.9	.1285-02
8	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	31.500	.11100-01	83.000	1.347	1.636	1.832	45.99	61.96	.4330	569.0	.1578-01
8	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	31.500	.16000-01	85.000	2.100	2.555	2.866	45.50	95.53	.4389	576.7	.2464-01
8	31.500	.17600-01	86.000	1.268	1.544	1.732	45.35	57.50	.4407	579.0	.1489-01
8	31.500	.19400-01	87.000	.8303	1.012	1.136	45.22	37.54	.4423	581.1	.9755-02
10	32.100	.21010	241.00	.8335-01	.1007	.1124	48.52	4.045	.4190	565.5	.9877-03
9	32.200	.16480	213.00	.1602	.1936	.2162	47.05	7.539	.4205	552.6	.1869-02
10	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	32.200	.18700	228.00	.1428	.1725	.1926	48.46	6.920	.4197	566.5	.1692-02
9	32.300	.12100	197.00	.3097	.3745	.4181	46.99	14.55	.4213	553.6	.3614-02
9	32.300	.12300	194.00	.2843	.3437	.3838	46.96	13.35	.4216	553.9	.3317-02
9	32.300	.12730	208.00	.8384-01	.1014	.1132	46.98	3.939	.4214	553.7	.9782-03

FH:S, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A023)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
9	32.300	.13420	209.00	.1598	.1931	.2156	47.05	7.517	.4205	552.6	.1863-02
9	32.400	.10000+00	147.00	.4151	.5018	.5603	47.01	19.52	.4210	553.2	.4843-02
9	32.400	.10110	184.00	.3914	.4731	.5282	47.02	18.40	.4209	553.1	.4565-02
9	32.400	.10630	193.00	.9685-01	.1170	.1307	47.06	4.558	.4204	552.4	.1130-02
9	32.500	.85800-01	183.00	.1507	.1822	.2034	47.05	7.093	.4205	552.6	.1758-02
8	32.500	.92500-01	144.00	.2852	.3455	.3863	46.52	13.27	.4267	560.7	.3335-02
8	32.600	.79500-01	137.00	.4968	.6016	.6725	46.59	23.14	.4259	559.6	.5806-02
9	32.600	.80800-01	176.00	.5047	.6101	.6812	47.00	23.72	.4211	553.3	.5888-02
8	32.700	.67400-01	132.00	.2190	.2652	.2965	46.57	10.20	.4260	559.8	.2560-02
8	32.700	.72400-01	134.00	.2861	.3464	.3872	46.59	13.33	.4258	559.5	.3343-02
8	32.800	.65700-01	130.00	.1571	.1903	.2127	46.59	7.321	.4259	559.5	.1837-02
9	32.800	.16680	210.00	.1238	.1496	.1670	47.11	5.832	.4198	551.6	.1444-02
10	32.800	.18880	225.00	.6372-01	.7696-01	.8589-01	48.52	3.002	.4190	565.5	.7550-03
10	32.800	.21170	239.00	.4921-01	.5945-01	.6636-01	48.47	2.385	.4197	566.3	.5832-03
8	32.900	.58600-01	116.00	.4152	.5027	.5619	46.60	19.35	.4257	559.4	.4852-02
8	32.900	.60400-01	122.00	.3352	.4664	.5213	46.60	17.95	.4257	559.3	.4501-02
9	32.900	.61300-01	171.00	.3576	.4321	.4823	47.11	16.85	.4198	551.6	.4170-02
8	33.000	.53500-01	115.00	.3177	.3847	.4301	46.59	14.80	.4259	559.5	.3713-02
8	33.200	.46800-01	111.00	.1742	.2110	.2359	46.54	8.108	.4264	560.3	.2037-02
8	33.200	.48300-01	113.00	.1913	.2316	.2589	46.57	8.907	.4260	559.8	.2235-02
9	33.400	.42800-01	166.00	.5341	.6457	.7210	46.98	25.09	.4214	553.7	.6231-02
8	33.500	.40100-01	99.000	.5277	.6393	.7148	46.51	24.54	.4268	560.8	.6170-02
8	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	33.600	.38300-01	97.000	.4894	.5929	.6630	46.47	22.74	.4273	561.5	.5722-02
8	33.700	.36700-01	96.000	.4783	.5795	.6481	46.45	22.21	.4275	561.7	.5592-02
8	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	34.700	.18700	227.00	.1317	.1591	.1776	48.46	6.382	.4197	566.5	.1561-02
10	34.700	.21010	240.00	.9362-01	.1132	.1264	48.36	4.528	.4209	568.0	.1110-02
9	34.900	.16480	212.00	.1605	.1941	.2167	47.02	7.548	.4209	553.1	.1873-02
9	35.100	.10000+00	148.00	.4116	.4975	.5555	47.01	19.35	.4211	553.3	.4802-02
9	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	35.300	.22100-01	160.00	.1792	.2166	.2418	47.05	8.433	.4205	552.6	.2090-02
8	35.300	.92500-01	145.00	.2913	.3528	.3945	46.52	13.55	.4266	560.6	.3405-02
10	35.400	.18800	231.00	.1322	.1597	.1783	48.47	6.408	.4197	566.4	.1567-02
9	35.500	.12100	196.00	.3225	.3899	.4353	46.97	15.15	.4215	553.9	.3762-02
9	35.600	.16580	216.00	.1535	.1856	.2072	47.01	7.218	.4210	553.2	.1791-02
8	35.800	.80600-01	138.00	.4288	.5193	.5806	46.54	19.95	.4264	560.3	.5012-02
10	35.900	.21310	247.00	.7370-01	.8902-01	.9934-01	48.53	3.577	.4189	565.4	.8733-03
10	36.000	.19040	235.00	.1062	.1283	.1432	48.49	5.150	.4194	566.0	.1259-02
8	36.200	.72400-01	135.00	.2354	.2849	.3185	46.65	10.98	.4251	558.6	.2750-02
9	36.200	.16810	220.00	.1385	.1674	.1869	47.04	6.516	.4206	552.7	.1616-02
9	36.300	.12200	200.00	.3292	.3981	.4445	46.96	15.46	.4216	553.9	.3841-02
8	36.600	.65700-01	131.00	.2345	.2839	.3174	46.58	10.92	.4260	559.7	.2740-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H1/HREF (R3A023)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
10	36.700	.18700	226.00	.1182	.1429	.1595	48.46	5.730	.4197	566.4	.1401-02
9	36.900	.10110	187.00	.3770	.4556	.5087	47.05	17.74	.4205	552.6	.4398-02
9	36.900	.16480	211.00	.1505	.1819	.2031	47.05	7.081	.4205	552.6	.1755-02
8	37.000	.60400-01	123.00	.4895	.5927	.6625	46.62	22.82	.4254	559.0	.5720-02
9	37.000	.12440	204.00	.2790	.3374	.3769	46.92	13.09	.4222	554.7	.3256-02
8	37.100	.58600-01	119.00	.4312	.5223	.5840	46.53	20.06	.4266	560.5	.5041-02
10	37.200	.21310	246.00	.7592-01	.9170-01	.1023	48.54	3.685	.4189	565.3	.8996-03
10	37.300	.19040	234.00	.9846-01	.1190	.1328	48.45	4.771	.4198	566.6	.1167-02
8	37.600	.53500-01	116.00	.3741	.4531	.5066	46.54	17.41	.4264	560.3	.4373-02
9	37.600	.16810	219.00	.1282	.1550	.1730	46.99	6.024	.4213	553.5	.1496-02
9	37.800	.10270	150.00	.2790	.3373	.3767	46.97	13.11	.4215	553.8	.3256-02
9	37.900	.12100	195.00	.1956	.2365	.2642	46.91	9.175	.4222	554.8	.2283-02
9	38.000	.80300-01	179.00	.3918	.4735	.5286	47.05	18.43	.4205	552.6	.4569-02
8	38.500	.46800-01	112.00	.2586	.3132	.3502	46.54	12.03	.4265	560.4	.3023-02
9	38.600	.12440	203.00	.2289	.2768	.3092	46.90	10.74	.4224	555.0	.2672-02
9	38.700	.10000+00	185.00	.3077	.3719	.4152	47.05	14.48	.4205	552.6	.3590-02
8	38.900	.82200-01	141.00	.3173	.3843	.4296	46.54	14.76	.4264	560.3	.3709-02
8	39.300	.41600-01	104.00	.5396	.6537	.7310	46.49	25.09	.4270	561.1	.6309-02
9	39.500	.10270	190.00	.2946	.3560	.3974	47.06	13.86	.4204	552.4	.3436-02
9	39.600	.16810	218.00	.1019	.1232	.1375	47.00	4.788	.4212	553.5	.1189-02
8	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	39.900	.19040	233.00	.7222-01	.8726-01	.9741-01	48.45	3.499	.4199	566.7	.8560-03
9	40.100	.79500-01	177.00	.3375	.4079	.4554	47.03	15.87	.4208	552.9	.3937-02
9	40.200	.12440	202.00	.1937	.2342	.2616	46.90	9.083	.4224	555.0	.2260-02
10	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	41.100	.60700-01	173.00	.4536	.5482	.6121	47.04	21.34	.4207	552.8	.5291-02
8	41.100	.82200-01	142.00	.3233	.3916	.4378	46.54	15.05	.4265	560.3	.3779-02
9	42.300	.10270	189.00	.2080	.2515	.2808	47.01	9.780	.4211	553.2	.2427-02
9	42.600	.59600-01	172.00	.4303	.5202	.5809	47.00	20.23	.4211	553.4	.5020-02
9	43.200	.42000-01	168.00	.4573	.5530	.6176	46.92	21.45	.4222	554.7	.5337-02
9	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	43.600	.62900-01	128.00	.3811	.4616	.5160	46.58	17.75	.4260	559.7	.4455-02
8	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
8	45.000	.32900-01	8.0000	1.157	1.403	1.570	46.33	53.61	.4290	563.7	.1354-01
9	46.100	.62900-01	174.00	.4039	.4882	.5451	47.01	18.99	.4210	553.2	.4712-02
9	47.700	.40800-01	167.00	.4946	.5981	.6681	46.91	23.20	.4223	554.9	.5772-02
8	48.400	.44200-01	109.00	.5393	.6535	.7308	46.44	25.05	.4276	561.8	.6307-02
9	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	51.000	.12100-01	154.00	3.071	3.727	4.173	46.10	141.6	.4319	567.5	.3595-01
9	51.000	.17600-01	155.00	1.802	2.192	2.458	45.55	82.06	.4385	576.2	.2113-01
9	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
9	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH1S, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A023)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
9	65.200	.24700-01	162.00	.8366	1.013	1.132	46.65	39.03	.4253	558.9	.9772-02
10	90.000	.91000-02	44.000	1.048	1.271	1.423	47.44	49.71	.4316	582.4	.1246-01
10	90.000	.11100-01	45.000	1.346	1.632	1.826	47.59	64.04	.4298	580.1	.1600-01
10	90.000	.13100-01	46.000	1.185	1.436	1.606	47.75	56.57	.4280	577.6	.1408-01
10	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	90.000	.17000-01	48.000	.9572	1.160	1.297	47.81	45.76	.4274	576.7	.1137-01
10	90.000	.20900-01	50.000	.8726	1.057	1.182	47.85	41.75	.4268	576.0	.1036-01
10	90.000	.24900-01	52.000	.6443	.7770	.8661	48.92	31.52	.4144	559.3	.7624-02
10	90.000	.26900-01	53.000	.7105	.8605	.9621	47.89	34.03	.4263	575.3	.8438-02
10	90.000	.28800-01	54.000	.6885	.8337	.9319	47.93	33.00	.4259	574.7	.8175-02
10	90.000	.32800-01	55.000	.3473	.4203	.4696	48.11	16.71	.4238	571.9	.4122-02
10	90.000	.36700-01	56.000	.4915	.5948	.6647	48.05	23.61	.4246	572.9	.5833-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	135.00	.19000-01	49.000	.9102	1.103	1.233	47.80	43.51	.4274	576.7	.1081-01
10	135.00	.22900-01	51.000	.8017	.9712	1.086	47.86	38.37	.4267	575.9	.9523-02
10	180.00	.91000-02	23.000	.5539	.6797	.7611	47.35	26.51	.4327	583.9	.6663-02
10	180.00	.11100-01	24.000	1.318	1.597	1.786	47.74	62.91	.4282	577.8	.1566-01
10	180.00	.13100-01	25.000	1.172	1.419	1.586	47.96	56.21	.4256	574.3	.1392-01
10	180.00	.15000-01	26.000	1.138	1.377	1.539	48.03	54.65	.4247	573.2	.1351-01
10	180.00	.17000-01	27.000	1.016	1.229	1.373	48.11	48.87	.4238	571.9	.1205-01
10	180.00	.19000-01	28.000	.9352	1.131	1.264	48.17	45.05	.4231	571.0	.1110-01
10	180.00	.20900-01	29.000	.8535	1.032	1.153	48.26	41.19	.4221	569.7	.1012-01
10	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	180.00	.28800-01	32.000	.6801	.8217	.9172	48.46	32.96	.4197	566.4	.8060-02
10	180.00	.32800-01	33.000	.6154	.7433	.8295	48.54	29.88	.4188	565.2	.7292-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	225.00	.22900-01	30.000	.7900	.9533	1.063	48.75	38.51	.4163	561.9	.9353-02
10	270.00	.91000-02	63.000	.9295	1.126	1.259	47.89	44.52	.4263	575.3	.1104-01
10	270.00	.11100-01	64.000	1.357	1.642	1.834	48.10	65.27	.4239	572.1	.1610-01

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H/HREF (R3A023)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
10	270.00	.13100-01	65.000	1.141	1.379	1.539	48.39	55.21	.4205	567.5	.1353-01
10	270.00	.17000-01	67.000	.9103	1.099	1.226	48.68	44.31	.4172	563.0	.1078-01
10	270.00	.20900-01	69.000	.8295	1.001	1.116	48.83	40.50	.4155	560.8	.9818-02
10	270.00	.24900-01	71.000	.7585	.9151	1.020	48.83	37.04	.4155	560.8	.8979-02
10	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	315.00	.15000-01	66.000	.9539	1.152	1.285	48.61	46.37	.4180	564.1	.1130-01
10	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
10	315.00	.22900-01	70.000	.7733	.9327	1.040	48.90	37.82	.4147	559.6	.9152-02

E.T. OGIVE

PARAMETRIC DATA

ALPHA = -5.000 BETA = -6.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
47	-5.000	-6.000	5.300	.4820+07	406.1	1333.	325.9	.5347	205.2	.2186-03	3722.	.2750-01
48	-5.000	-6.000	5.300	.5016+07	405.2	1298.	317.0	.5345	199.6	.2247-03	3670.	.2750-01
49	-5.000	-6.000	5.300	.4844+07	403.0	1322.	323.2	.5310	203.5	.2189-03	3706.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
47	.0000	.2582
48	.0000	.2574
49	.0000	.2571

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
47	.00000	.91000-02	1.0000	.9189	1.111	1.242	48.49	44.55	.4230	574.6	.1095-01
47	.00000	.11100-01	2.0000	1.026	1.241	1.386	48.58	49.84	.4220	573.2	.1222-01
47	.00000	.13100-01	3.0000	.6956	.8401	.9375	48.86	33.99	.4187	568.7	.8277-02
47	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	.00000	.17000-01	5.0000	.8688	1.050	1.172	48.79	42.39	.4196	569.9	.1034-01
47	.00000	.19000-01	6.0000	.8339	1.007	1.124	48.86	40.74	.4187	568.7	.9923-02
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	.00000	.24900-01	9.0000	.7358	.8882	.9908	49.01	36.06	.4170	566.5	.8752-02
47	.00000	.26900-01	10.000	.7243	.8740	.9748	49.07	35.54	.4163	565.5	.8612-02
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	.00000	.32800-01	12.000	.6298	.7627	.8526	47.62	29.99	.4261	573.9	.7501-02
49	.00000	.36700-01	13.000	.5247	.6349	.7094	47.81	25.09	.4239	570.9	.6246-02
49	.00000	.40600-01	14.000	.5807	.7030	.7857	47.72	27.71	.4250	572.4	.6914-02
49	.00000	.48500-01	15.000	.5048	.6109	.6827	47.79	24.12	.4241	571.3	.6010-02
49	.00000	.56400-01	16.000	.4936	.5972	.6672	47.86	23.62	.4233	570.2	.5875-02
49	.00000	.76100-01	17.000	.3872	.4681	.5227	48.02	18.59	.4214	567.6	.4605-02
49	.00000	.95800-01	18.000	.3206	.3875	.4326	48.11	15.43	.4204	566.2	.3812-02
49	.00000	.11550	19.000	.2603	.3149	.3518	47.89	12.47	.4229	569.6	.3098-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A103)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
49	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	.00000	.21400	22.000	.8999-01	.1087	.1214	48.12	4.330	.4202	566.0	.1070-02
48	2.0000	.24700-01	165.00	.6504	.7903	.8855	46.03	29.94	.4351	574.8	.7657-02
48	9.0000	.15000-01	157.00	.7849	.9543	1.070	45.89	36.02	.4367	576.9	.9244-02
48	9.0000	.17600-01	158.00	.8435	1.025	1.150	45.90	38.72	.4366	576.8	.9935-02
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	9.8000	.24700-01	164.00	.6929	.8425	.9445	45.89	31.80	.4368	577.0	.8162-02
47	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	10.000	.30800-01	92.000	.6622	.7994	.8917	49.01	32.45	.4170	566.4	.7877-02
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	14.600	.44200-01	169.00	.5168	.6273	.7024	46.26	23.91	.4323	571.1	.6079-02
47	18.500	.44200-01	106.00	.5230	.6310	.7036	49.13	25.70	.4156	564.5	.6218-02
48	19.600	.62900-01	175.00	.4126	.5008	.5607	46.29	19.10	.4320	570.7	.4853-02
47	19.800	.40800-01	101.00	.5596	.6753	.7531	49.08	27.47	.4162	565.3	.6655-02
47	20.000	.24900-01	89.000	.7044	.8515	.9507	48.66	34.28	.4210	571.8	.8388-02
47	20.000	.28800-01	91.000	.6454	.7793	.8695	48.92	31.57	.4180	567.8	.7679-02
47	20.000	.32800-01	93.000	.6203	.7489	.8355	48.96	30.37	.4176	567.2	.7379-02
48	21.800	.82200-01	182.00	.3293	.3996	.4473	46.33	15.26	.4315	570.1	.3872-02
47	22.200	.62900-01	125.00	.4261	.5137	.5725	49.30	21.01	.4136	561.8	.5062-02
47	22.400	.44200-01	107.00	.5230	.6309	.7035	49.15	25.70	.4154	564.2	.6217-02
48	22.600	.10270	192.00	.2553	.3098	.3468	46.35	11.83	.4313	569.8	.3002-02
47	23.000	.42000-01	105.00	.5371	.6481	.7228	49.09	26.37	.4161	565.1	.6387-02
47	23.400	.59600-01	120.00	.4303	.5188	.5783	49.29	21.21	.4137	562.0	.5113-02
49	23.900	.21310	250.00	.6932-01	.8383-01	.9363-01	47.96	3.324	.4222	568.6	.8247-03
47	24.100	.82200-01	139.00	.3372	.4066	.4532	49.26	16.61	.4142	562.5	.4007-02
48	24.400	.12440	207.00	.2080	.2527	.2831	46.09	9.589	.4343	573.8	.2448-02
49	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	24.800	.16810	223.00	.1223	.1479	.1651	48.01	5.872	.4216	567.8	.1455-02
47	24.900	.62900-01	126.00	.4191	.5052	.5631	49.30	20.66	.4136	561.8	.4979-02
48	25.000	.79500-01	178.00	.3426	.4157	.4654	46.32	15.87	.4316	570.2	.4029-02
48	25.300	.10000+00	186.00	.2618	.3177	.3557	46.29	12.12	.4319	570.6	.3079-02
48	25.300	.10270	191.00	.2559	.3105	.3476	46.34	11.86	.4314	569.9	.3009-02
47	25.500	.60700-01	124.00	.4243	.5115	.5701	49.32	20.93	.4134	561.5	.5042-02
48	26.000	.12440	206.00	.2057	.2498	.2799	46.13	9.488	.4339	573.2	.2421-02
47	26.300	.82200-01	140.00	.3145	.3792	.4227	49.29	15.50	.4138	562.0	.3737-02
48	26.700	.12100	199.00	.2043	.2481	.2779	46.14	9.424	.4338	573.1	.2404-02
49	26.800	.16810	222.00	.1116	.1349	.1507	48.02	5.359	.4214	567.6	.1327-02
49	27.000	.19040	237.00	.8853-01	.1071	.1197	47.85	4.236	.4234	570.3	.1054-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A103)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
49	27.100	.21310	249.00	.7186-01	.8689-01	.9705-01	47.97	3.447	.4220	568.4	.8549-03
48	27.200	.80300-01	180.00	.3398	.4123	.4616	46.33	15.74	.4316	570.1	.3995-02
48	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	27.400	.40100-01	98.000	.4921	.5937	.6621	49.11	24.17	.4159	564.8	.5851-02
48	27.400	.16480	215.00	.1154	.1401	.1569	46.14	5.323	.4338	573.0	.1357-02
47	27.600	.41600-01	102.00	.5482	.6615	.7377	49.10	26.92	.4159	565.0	.6518-02
48	27.600	.12440	205.00	.2033	.2470	.2768	46.07	9.366	.4347	574.2	.2393-02
49	27.600	.18700	230.00	.8586-01	.1039	.1161	47.81	4.105	.4239	570.9	.1022-02
49	27.700	.21010	243.00	.7297-01	.8828-01	.9863-01	47.84	3.490	.4236	570.5	.8684-03
48	27.900	.10110	188.00	.2526	.3065	.3432	46.27	11.69	.4322	570.9	.2970-02
47	28.000	.46800-01	110.00	.4914	.5928	.6610	49.16	24.16	.4153	564.1	.5842-02
49	28.200	.16810	221.00	.1141	.1380	.1541	48.04	5.483	.4212	567.3	.1357-02
48	28.300	.12200	201.00	.2092	.2541	.2846	46.14	9.652	.4338	573.1	.2462-02
49	28.300	.19040	236.00	.7707-01	.9323-01	.1041	47.87	3.689	.4232	570.0	.9171-03
47	28.400	.53500-01	114.00	.4628	.5582	.6223	49.23	22.79	.4145	563.0	.5501-02
49	28.400	.21310	248.00	.6378-01	.7711-01	.8610-01	48.01	3.062	.4215	567.8	.7586-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	28.800	.60400-01	121.00	.4108	.4952	.5519	49.34	20.27	.4133	561.3	.4881-02
48	28.800	.16580	217.00	.1070	.1299	.1454	46.19	4.941	.4331	572.2	.1258-02
49	28.900	.18800	232.00	.8156-01	.9869-01	.1103	47.81	3.899	.4239	570.9	.9708-03
47	29.000	.65700-01	129.00	.4025	.4853	.5409	49.31	19.85	.4136	561.8	.4783-02
49	29.000	.21110	244.00	.6149-01	.7437-01	.8308-01	47.92	2.947	.4226	569.2	.7317-03
47	29.200	.72400-01	133.00	.3588	.4326	.4821	49.30	17.69	.4136	561.8	.4263-02
47	29.300	.79500-01	136.00	.3217	.3878	.4321	49.36	15.88	.4130	560.9	.3822-02
47	29.600	.92500-01	143.00	.2885	.3479	.3878	49.25	14.21	.4142	562.6	.3428-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	29.900	.12100	198.00	.2022	.2455	.2749	46.22	9.346	.4328	571.7	.2378-02
48	30.200	.16480	214.00	.9656-01	.1172	.1313	46.19	4.460	.4331	572.2	.1136-02
49	30.200	.18700	229.00	.7757-01	.9385-01	.1048	47.84	3.711	.4235	570.4	.9232-03
49	30.300	.21010	242.00	.6641-01	.8033-01	.8974-01	47.88	3.180	.4231	569.9	.7903-03
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	31.500	.11100-01	83.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	32.100	.21010	241.00	.6235-01	.7542-01	.8426-01	47.87	2.984	.4232	570.1	.7420-03
48	32.200	.16480	213.00	.1004	.1219	.1366	46.18	4.637	.4333	572.4	.1182-02
49	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	32.200	.18700	228.00	.7835-01	.9480-01	.1059	47.81	3.746	.4239	570.9	.9326-03
48	32.300	.12100	197.00	.2032	.2468	.2764	46.18	9.385	.4333	572.4	.2391-02
48	32.300	.12300	194.00	.1870	.2271	.2544	46.12	8.625	.4340	573.3	.2201-02
48	32.300	.12730	208.00	.1857	.2255	.2526	46.16	8.572	.4336	572.8	.2185-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A103)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
48	32.300	.13420	209.00	.1757	.2133	.2389	46.24	8.125	.4326	571.5	.2067-02
48	32.400	.10000+00	147.00	.2527	.3067	.3434	46.27	11.69	.4323	571.0	.2972-02
48	32.400	.10110	184.00	.2506	.3041	.3405	46.27	11.59	.4323	571.0	.2947-02
48	32.400	.10630	193.00	.2396	.2907	.3255	46.33	11.10	.4316	570.1	.2817-02
48	32.500	.85800-01	183.00	.3031	.3678	.4118	46.33	14.04	.4316	570.1	.3564-02
47	32.500	.92500-01	144.00	.2775	.3347	.3731	49.23	13.66	.4145	563.0	.3298-02
47	32.600	.79500-01	137.00	.3232	.3897	.4343	49.30	15.94	.4136	561.8	.3840-02
48	32.600	.80800-01	176.00	.3175	.3852	.4313	46.33	14.71	.4316	570.1	.3733-02
47	32.700	.67400-01	132.00	.3804	.4587	.5113	49.28	18.75	.4140	562.3	.4521-02
47	32.700	.72400-01	134.00	.3641	.4389	.4892	49.31	17.95	.4136	561.8	.4326-02
47	32.800	.65700-01	130.00	.3978	.4797	.5347	49.27	19.60	.4140	562.4	.4728-02
48	32.800	.16680	210.00	.1018	.1236	.1384	46.27	4.711	.4322	571.0	.1197-02
49	32.800	.18880	225.00	.7040-01	.8517-01	.9516-01	47.85	3.339	.4234	570.2	.8379-03
49	32.800	.21170	239.00	.5908-01	.7149-01	.7988-01	47.80	2.824	.4240	571.0	.7032-03
47	32.900	.58600-01	118.00	.4409	.5316	.5925	49.28	21.73	.4139	562.2	.5239-02
47	32.900	.60400-01	122.00	.3380	.4676	.5211	49.37	19.15	.4129	560.8	.4609-02
48	32.900	.61300-01	171.00	.3824	.4640	.5194	46.35	17.72	.4313	569.8	.4496-02
47	33.000	.53500-01	115.00	.4614	.5564	.6202	49.27	22.73	.4141	562.4	.5483-02
47	33.200	.46800-01	111.00	.4899	.5909	.6587	49.20	24.10	.4148	563.4	.5823-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	33.400	.42800-01	166.00	.5124	.6222	.6968	46.19	23.67	.4331	572.2	.6028-02
47	33.500	.40100-01	99.000	.5227	.6306	.7033	49.10	25.66	.4159	564.9	.6214-02
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	33.600	.38300-01	97.000	.5393	.6509	.7259	49.07	26.46	.4163	565.5	.6414-02
47	33.700	.36700-01	96.000	.5630	.6795	.7579	49.05	27.62	.4165	565.7	.6696-02
47	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	34.700	.18700	227.00	.7107-01	.8604-01	.9617-01	47.68	3.389	.4254	572.9	.8463-03
49	34.700	.21010	240.00	.6670-01	.8076-01	.9027-01	47.67	3.180	.4255	573.1	.7944-03
48	34.900	.16480	212.00	.1085	.1318	.1476	46.19	5.014	.4331	572.2	.1277-02
48	35.100	.10000+00	148.00	.2515	.3053	.3418	46.27	11.64	.4323	571.0	.2958-02
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	35.300	.22100-01	160.00	.6970	.8472	.9496	45.95	32.02	.4361	576.1	.8208-02
47	35.300	.92500-01	145.00	.2710	.3268	.3643	49.28	13.36	.4139	562.2	.3221-02
49	35.400	.18800	231.00	.8147-01	.9858-01	.1101	47.81	3.895	.4238	570.9	.9697-03
48	35.500	.12100	196.00	.1953	.2372	.2656	46.18	9.019	.4333	572.4	.2298-02
48	35.600	.16580	216.00	.1130	.1372	.1537	46.19	5.221	.4331	572.2	.1330-02
47	35.800	.80600-01	138.00	.2953	.3561	.3970	49.25	14.54	.4143	562.7	.3510-02
49	35.900	.21310	247.00	.6162-01	.7454-01	.8327-01	47.88	2.950	.4231	569.9	.7332-03
49	36.000	.19040	235.00	.8411-01	.1018	.1137	47.81	4.021	.4239	571.0	.1001-02
47	36.200	.72400-01	135.00	.2885	.3476	.3873	49.44	14.26	.4121	559.7	.3426-02
48	36.200	.16810	220.00	.1164	.1413	.1583	46.20	5.378	.4330	572.0	.1369-02
48	36.300	.12200	200.00	.1921	.2333	.2613	46.14	8.861	.4338	573.1	.2260-02
47	36.600	.65700-01	131.00	.3861	.4654	.5187	49.32	19.04	.4134	561.5	.4587-02

FH:S, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A103)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
49	36.700	.18700	226.00	.8310-01	.1006	.1124	47.80	3.973	.4239	571.0	.9892-03
48	36.900	.10110	187.00	.2484	.3014	.3374	46.34	11.51	.4314	569.9	.2921-02
48	36.900	.16480	211.00	.1150	.1396	.1564	46.21	5.315	.4329	571.9	.1353-02
47	37.000	.60400-01	123.00	.4121	.4966	.5534	49.38	20.35	.4127	560.6	.4895-02
48	37.000	.12440	204.00	.1880	.2284	.2559	46.09	8.665	.4344	573.8	.2213-02
47	37.100	.58600-01	119.00	.4290	.5173	.5767	49.23	21.12	.4145	563.0	.5098-02
49	37.200	.21310	246.00	.5988-01	.7244-01	.8092-01	47.88	2.867	.4230	569.8	.7126-03
49	37.300	.19040	234.00	.8281-01	.1002	.1120	47.74	3.954	.4246	572.0	.9859-03
47	37.600	.53500-01	116.00	.4402	.5307	.5916	49.28	21.69	.4139	562.1	.5231-02
48	37.600	.16810	219.00	.1149	.1395	.1562	46.19	5.306	.4331	572.2	.1351-02
48	37.800	.10270	150.00	.2431	.2951	.3305	46.22	11.23	.4329	571.8	.2860-02
48	37.900	.12100	195.00	.1944	.2360	.2643	46.18	8.976	.4333	572.4	.2287-02
48	38.000	.80300-01	179.00	.3175	.3852	.4312	46.34	14.71	.4314	569.9	.3733-02
47	38.500	.46800-01	112.00	.4728	.5702	.6357	49.23	23.28	.4145	563.0	.5620-02
48	38.600	.12440	203.00	.1859	.2258	.2530	46.07	8.564	.4346	574.2	.2188-02
48	38.700	.10000+00	185.00	.2405	.2918	.3267	46.29	11.13	.4320	570.7	.2828-02
47	38.900	.82200-01	141.00	.2976	.3588	.4000	49.30	14.68	.4136	561.8	.3537-02
47	39.300	.41600-01	104.00	.5079	.6128	.6834	49.10	24.94	.4159	564.9	.6038-02
48	39.500	.10270	190.00	.2448	.2970	.3324	46.37	11.35	.4311	569.4	.2878-02
48	39.600	.16810	218.00	.1106	.1343	.1504	46.20	5.110	.4331	572.1	.1301-02
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	39.900	.19040	233.00	.6704-01	.8112-01	.9065-01	47.78	3.203	.4242	571.3	.7980-03
48	40.100	.79500-01	177.00	.3154	.3827	.4284	46.36	14.62	.4312	569.6	.3709-02
48	40.200	.12440	202.00	.1849	.2247	.2517	46.07	8.520	.4346	574.1	.2177-02
49	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	41.100	.60700-01	173.00	.3951	.4794	.5366	46.35	18.31	.4313	569.8	.4645-02
47	41.100	.82200-01	142.00	.3051	.3679	.4100	49.30	15.04	.4136	561.8	.3626-02
48	42.300	.10270	189.00	.2416	.2931	.3281	46.35	11.20	.4313	569.7	.2840-02
48	42.600	.59600-01	172.00	.4090	.4964	.5557	46.32	18.95	.4316	570.2	.4810-02
48	43.200	.42000-01	168.00	.4525	.5493	.6151	46.25	20.93	.4325	571.3	.5323-02
48	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	43.600	.62900-01	128.00	.3578	.4314	.4808	49.31	17.65	.4135	561.7	.4252-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	45.000	.22900-01	8.0000	.9583	1.158	1.293	48.71	46.68	.4204	571.0	.1141-01
48	46.100	.62900-01	174.00	.3797	.4607	.5157	46.35	17.60	.4312	569.7	.4464-02
48	47.700	.40800-01	167.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	48.400	.44200-01	109.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A103)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT2SEC	QDOT BTU/FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
48	65.200	.24700-01	162.00	.7004	.8512	.9539	45.99	32.21	.4356	575.4	.8247-02
49	90.000	.91000-02	44.000	.4108	.4992	.5595	46.80	19.22	.4357	586.9	.4908-02
49	90.000	.11100-01	45.000	.7358	.8936	1.001	46.95	34.55	.4339	584.4	.8786-02
49	90.000	.13100-01	46.000	1.069	1.298	1.453	47.08	50.34	.4324	582.5	.1276-01
49	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	90.000	.17000-01	48.000	.7562	.9173	1.027	47.23	35.72	.4307	580.1	.9020-02
49	90.000	.20900-01	50.000	.7175	.8701	.9737	47.29	33.93	.4299	579.1	.8556-02
49	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	90.000	.26900-01	53.000	.6194	.7504	.8392	47.51	29.43	.4273	575.6	.7380-02
49	90.000	.28800-01	54.000	.5849	.7086	.7923	47.53	27.80	.4271	575.3	.6969-02
49	90.000	.32800-01	55.000	.3224	.3899	.4355	47.93	15.45	.4224	569.0	.3836-02
49	90.000	.36700-01	56.000	.4599	.5564	.6217	47.83	21.99	.4237	570.7	.5474-02
47	90.000	.40600-01	57.000	.4867	.5872	.6547	49.13	23.31	.4157	564.6	.5786-02
47	90.000	.48500-01	58.000	.4020	.4847	.5402	49.30	19.82	.4136	561.8	.4777-02
47	90.000	.56400-01	59.000	.3670	.4424	.4931	49.31	18.10	.4135	561.7	.4360-02
47	90.000	.76100-01	60.000	.2854	.3441	.3836	49.29	14.07	.4138	562.0	.3392-02
47	90.000	.95800-01	61.000	.2148	.2590	.2889	49.23	10.57	.4145	563.0	.2553-02
47	90.000	.11550	62.000	.1569	.1894	.2113	49.03	7.695	.4168	566.1	.1867-02
49	135.00	.19000-01	49.000	.7274	.8795	.9822	48.00	34.91	.4217	568.0	.8653-02
49	135.00	.22900-01	51.000	.6955	.8399	.9372	48.28	33.58	.4183	563.5	.8265-02
49	180.00	.91000-02	23.000	.2486	.3021	.3386	46.79	11.63	.4358	587.0	.2970-02
49	180.00	.11100-01	24.000	.7403	.8967	1.003	47.59	35.23	.4265	574.5	.8819-02
49	180.00	.13100-01	25.000	1.024	1.238	1.382	48.03	49.18	.4213	567.5	.1218-01
49	180.00	.15000-01	26.000	.9631	1.163	1.299	48.19	46.41	.4195	565.0	.1145-01
49	180.00	.17000-01	27.000	.7615	.9191	1.025	48.42	36.88	.4167	561.3	.9044-02
49	180.00	.19000-01	28.000	.7440	.8972	1.000	48.61	36.16	.4145	558.4	.8830-02
49	180.00	.20900-01	29.000	.7236	.8717	.9712	48.86	35.35	.4117	554.5	.8581-02
49	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	180.00	.28800-01	32.000	.5932	.7135	.7940	49.28	29.23	.4068	547.9	.7025-02
49	180.00	.32800-01	33.000	.5215	.6269	.6974	49.41	25.77	.4052	545.8	.6173-02
48	180.00	.36700-01	34.000	.5191	.6279	.7015	47.02	24.41	.4233	559.1	.6088-02
48	180.00	.40600-01	35.000	.4625	.5597	.6254	46.95	21.71	.4242	560.3	.5426-02
48	180.00	.48500-01	36.000	.4070	.4929	.5511	46.78	19.04	.4262	563.0	.4778-02
48	180.00	.56400-01	37.000	.3788	.4586	.5125	46.83	17.74	.4256	562.2	.4446-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
48	180.00	.95800-01	39.000	.2248	.2726	.3050	46.50	10.46	.4294	567.3	.2642-02
48	180.00	.11550	40.000	.1699	.2062	.2308	46.33	7.871	.4316	570.1	.1998-02
48	180.00	.16480	41.000	.8347-01	.1014	.1135	46.19	3.856	.4331	572.2	.9820-03
48	180.00	.18450	42.000	.6152-01	.7465-01	.8356-01	46.35	2.851	.4313	569.8	.7234-03
0	180.00	.21900	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	225.00	.22900-01	30.000	.6984	.8405	.9357	49.13	34.32	.4084	550.1	.8275-02
49	270.00	.91000-02	63.000	.9953	1.207	1.351	47.30	47.07	.4209	579.0	.1187-01
49	270.00	.11100-01	64.000	1.079	1.307	1.461	47.57	51.32	.4267	574.7	.1285-01

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A103)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
49	270.00	.13100-01	65.000	1.031	1.247	1.393	47.96	49.46	.4222	568.6	.1227-01
49	270.00	.17000-01	67.000	.9028	1.089	1.214	48.55	43.82	.4153	559.4	.1072-01
49	270.00	.20900-01	69.000	.7896	.9514	1.060	48.84	38.57	.4118	554.7	.9365-02
49	270.00	.24900-01	71.000	.7518	.9054	1.008	48.98	36.82	.4103	552.6	.8913-02
49	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	270.00	.28800-01	73.000	.7039	.8466	.9421	49.30	35.12	.4068	552.5	.8347-02
47	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	270.00	.36700-01	75.000	.6550	.7879	.8770	49.85	32.65	.4074	553.3	.7768-02
47	270.00	.40600-01	76.000	.6071	.7304	.8129	49.82	30.25	.4077	553.7	.7201-02
47	270.00	.48500-01	77.000	.5457	.6567	.7311	49.76	27.16	.4083	554.6	.6474-02
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
47	270.00	.76100-01	79.000	.4196	.5052	.5627	49.60	20.81	.4102	557.2	.4980-02
47	270.00	.95800-01	80.000	.3432	.4134	.4605	49.50	16.39	.4114	558.8	.4075-02
47	270.00	.11550	81.000	.2834	.3417	.3809	49.25	13.96	.4142	562.6	.3368-02
49	315.00	.15000-01	66.000	.9881	1.196	1.337	47.74	47.17	.4247	572.1	.1176-01
49	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
49	315.00	.22900-01	70.000	.7896	.9536	1.064	48.26	38.11	.4166	563.8	.9384-02

E.T. OGIVE

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
32	-5.000	.0000	5.300	.4659+07	402.4	1354.	331.3	.5292	208.6	.2129-03	3752.	.2750-01
33	-5.000	.0000	5.300	.4545+07	404.8	1380.	338.0	.5315	212.9	.2095-03	3790.	.2750-01
34	-5.000	.0000	5.300	.4717+07	405.6	1350.	330.3	.5335	208.0	.2152-03	3747.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
32	.0000	.2573
33	.0000	.2584
34	.0000	.2583

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
34	.00000	.91000-02	1.0000	.7595	.9190	1.027	49.07	37.27	.4239	583.6	.9133-02
34	.00000	.11100-01	2.0000	1.066	1.289	1.439	49.31	52.58	.4212	579.8	.1281-01
34	.00000	.13100-01	3.0000	.7663	.9254	1.033	49.54	37.96	.4185	576.2	.9199-02
34	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	.00000	.17000-01	5.0000	.9138	1.102	1.229	49.79	45.50	.4156	572.2	.1096-01
34	.00000	.19000-01	6.0000	.8875	1.070	1.193	49.93	44.31	.4141	570.1	.1064-01
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	.00000	.24900-01	9.0000	.7671	.9243	1.030	50.11	38.44	.4121	567.3	.9191-02
34	.00000	.26900-01	10.000	.7515	.9054	1.009	50.16	37.70	.4114	566.4	.9003-02
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	.00000	.32800-01	12.000	.6675	.8015	.8909	50.96	34.02	.4019	554.9	.8021-02
32	.00000	.36700-01	13.000	.5806	.6969	.7745	51.05	29.64	.4009	553.6	.6975-02
32	.00000	.40600-01	14.000	.6503	.7808	.8678	50.99	33.15	.4016	554.6	.7814-02
32	.00000	.48500-01	15.000	.5635	.6764	.7518	51.03	28.75	.4011	553.9	.6770-02
32	.00000	.56400-01	16.000	.5329	.6397	.7110	51.02	27.19	.4012	553.9	.6403-02
32	.00000	.76100-01	17.000	.4076	.4893	.5438	51.04	20.81	.4010	553.7	.4897-02
32	.00000	.95900-01	18.000	.3374	.4051	.4503	50.99	17.20	.4016	554.6	.4054-02
32	.00000	.11550	19.000	.2785	.3345	.3719	50.88	14.17	.4029	556.3	.3348-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A105)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
32	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	.00000	.21400	22.000	.9338-01	.1121	.1246	51.06	4.768	.4008	553.4	.1122-02
33	2.0000	.24700-01	165.00	.6984	.8410	.9366	51.43	35.92	.4103	578.0	.8493-02
33	9.0000	.15000-01	157.00	.8169	.9850	1.098	51.10	41.75	.4139	583.1	.9945-02
33	9.0000	.17600-01	158.00	.9036	1.089	1.214	51.21	46.27	.4127	581.5	.1100-01
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	9.8000	.24700-01	164.00	.7633	.9202	1.026	51.15	39.04	.4134	582.4	.9291-02
34	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	10.000	.30800-01	92.000	.6935	.8358	.9314	50.04	34.70	.4128	568.3	.8312-02
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	14.600	.44200-01	169.00	.5356	.7168	.7979	51.58	30.72	.4086	575.6	.7239-02
34	18.500	.44200-01	106.00	.5969	.7194	.8017	50.03	29.86	.4130	568.5	.7154-02
33	19.600	.62900-01	175.00	.4552	.5481	.6104	51.46	23.43	.4099	577.5	.5535-02
34	19.800	.40800-01	101.00	.6371	.7682	.8562	49.95	31.83	.4138	569.7	.7638-02
34	20.000	.24900-01	89.000	.7647	.9230	1.030	49.69	37.99	.4169	573.9	.9176-02
34	20.000	.28800-01	91.000	.6990	.8431	.9401	49.85	34.85	.4150	571.3	.8383-02
34	20.000	.32800-01	93.000	.6825	.8229	.9173	49.93	34.08	.4141	570.1	.8183-02
33	21.800	.82200-01	182.00	.3723	.4480	.4987	51.61	19.21	.4083	575.2	.4524-02
34	22.200	.62900-01	125.00	.4644	.5595	.6233	50.15	23.29	.4116	566.7	.5564-02
34	22.400	.44200-01	107.00	.6020	.7257	.8087	50.01	30.10	.4132	568.9	.7216-02
33	22.600	.10270	192.00	.2939	.3536	.3936	51.66	15.18	.4078	574.5	.3571-02
34	23.000	.42000-01	105.00	.6213	.7491	.8350	49.95	31.03	.4139	569.8	.7449-02
34	23.400	.59600-01	120.00	.4731	.5701	.6352	50.09	23.70	.4122	567.5	.5669-02
32	23.900	.21310	250.00	.8731-01	.1049	.1166	50.82	4.437	.4035	557.2	.1050-02
34	24.100	.82200-01	139.00	.3763	.4535	.5053	50.07	18.84	.4125	567.8	.4510-02
33	24.400	.12440	207.00	.2388	.2873	.3198	51.62	12.32	.4082	575.0	.2902-02
32	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	24.800	.16810	223.00	.1511	.1816	.2021	50.67	7.656	.4052	559.5	.1818-02
34	24.900	.62900-01	126.00	.4620	.5567	.6202	50.11	23.15	.4120	567.2	.5536-02
33	25.000	.79500-01	178.00	.3857	.4643	.5170	51.52	19.87	.4093	576.6	.4689-02
33	25.300	.10000+00	186.00	.3063	.3686	.4103	51.59	15.80	.4085	575.5	.3722-02
33	25.300	.10270	191.00	.2967	.3570	.3975	51.60	15.31	.4083	575.3	.3606-02
34	25.500	.60700-01	124.00	.4682	.5642	.6286	50.10	23.46	.4121	567.4	.5611-02
33	26.000	.12440	206.00	.2370	.2852	.3175	51.58	12.23	.4086	575.6	.2881-02
34	26.300	.82200-01	140.00	.3556	.4285	.4774	50.09	17.81	.4123	567.6	.4261-02
33	26.700	.12100	199.00	.2383	.2869	.3194	51.55	12.28	.4090	576.2	.2897-02
32	26.800	.16810	222.00	.1404	.1687	.1877	50.67	7.112	.4052	559.5	.1688-02
32	27.000	.19040	237.00	.1127	.1355	.1507	50.74	5.720	.4044	558.4	.1356-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A105)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
32	27.100	.21310	249.00	.8039-01	.9659-01	.1074	50.82	4.085	.4035	557.2	.9665-03
33	27.200	.80300-01	180.00	.3857	.4643	.5170	51.50	19.87	.4094	576.8	.4689-02
33	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	27.400	.40100-01	98.000	.5636	.6795	.7574	49.96	28.16	.4137	569.5	.6756-02
33	27.400	.16480	215.00	.1384	.1665	.1854	51.68	7.154	.4075	574.0	.1682-02
34	27.600	.41600-01	102.00	.6315	.7614	.8488	49.93	31.53	.4141	570.1	.7571-02
33	27.600	.12440	205.00	.2346	.2823	.3143	51.58	12.10	.4086	575.7	.2851-02
32	27.600	.18700	230.00	.1084	.1303	.1449	50.73	5.501	.4045	558.6	.1304-02
32	27.700	.21010	243.00	.9221-01	.1108	.1233	50.73	4.678	.4045	558.5	.1109-02
33	27.900	.10110	188.00	.2956	.3558	.3962	51.55	15.24	.4089	576.1	.3594-02
34	28.000	.46800-01	110.00	.5485	.6613	.7371	49.94	27.39	.4140	569.9	.6576-02
32	28.200	.16810	221.00	.1451	.1745	.1941	50.67	7.354	.4052	559.5	.1746-02
33	28.300	.12200	201.00	.2445	.2943	.3276	51.59	12.32	.4085	575.5	.2972-02
32	28.300	.19040	236.00	.9996-01	.1201	.1336	50.73	5.071	.4045	558.6	.1202-02
34	28.400	.53500-01	114.00	.5173	.6235	.6949	50.02	25.87	.4131	568.7	.6200-02
32	28.400	.21310	248.00	.7998-01	.9609-01	.1069	50.81	4.063	.4036	557.3	.9616-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	28.800	.60400-01	121.00	.4626	.5574	.6211	50.09	23.17	.4122	567.5	.5543-02
33	28.800	.16580	217.00	.1309	.1575	.1753	51.66	6.764	.4077	574.4	.1591-02
32	28.900	.18800	232.00	.1022	.1228	.1366	50.71	5.182	.4048	558.9	.1229-02
34	29.000	.65700-01	129.00	.4511	.5436	.6057	50.10	22.60	.4122	567.5	.5405-02
32	29.000	.21110	244.00	.7978-01	.9587-01	.1066	50.75	4.048	.4043	558.3	.9594-03
34	29.200	.72400-01	133.00	.4165	.5020	.5594	50.04	20.84	.4128	568.3	.4992-02
34	29.300	.79500-01	136.00	.3710	.4471	.4982	50.08	18.58	.4124	567.7	.4446-02
34	29.600	.92500-01	143.00	.3371	.4063	.4528	50.02	16.86	.4131	568.7	.4040-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	29.900	.12100	198.00	.2379	.2863	.3187	51.58	12.27	.4086	575.6	.2891-02
33	30.200	.16480	214.00	.1182	.1422	.1583	51.66	6.106	.4077	574.4	.1436-02
32	30.200	.18700	229.00	.9666-01	.1162	.1292	50.73	4.903	.4045	558.6	.1162-02
32	30.300	.21010	242.00	.8328-01	.1001	.1113	50.74	4.226	.4044	558.4	.1001-02
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	31.500	.11100-01	83.000	1.120	1.355	1.514	49.12	55.02	.4232	582.7	.1347-01
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	32.100	.21010	241.00	.8043-01	.9668-01	.1075	50.69	4.077	.4049	559.1	.9674-03
33	32.200	.16480	213.00	.1221	.1470	.1636	51.64	6.307	.4079	574.7	.1484-02
32	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	32.200	.18700	228.00	.1061	.1275	.1419	50.67	5.375	.4052	559.5	.1276-02
33	32.300	.12100	197.00	.2385	.2871	.3197	51.49	12.28	.4096	577.0	.2900-02
33	32.300	.12300	194.00	.2187	.2633	.2932	51.46	11.25	.4099	577.5	.2659-02
33	32.300	.12730	208.00	.2190	.2635	.2934	51.59	11.30	.4085	575.5	.2661-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A105)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
33	32.300	.13420	209.00	.2068	.2486	.2765	51.86	10.72	.4055	571.3	.2511-02
33	32.400	.10000+00	147.00	.3021	.3638	.4052	51.42	15.54	.4104	578.1	.3674-02
33	32.400	.10110	194.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	32.400	.10630	193.00	.2845	.3425	.3814	51.50	14.65	.4095	576.9	.3459-02
33	32.500	.85800-01	183.00	.3558	.4286	.4774	51.37	18.28	.4109	578.9	.4328-02
34	32.500	.92500-01	144.00	.3263	.3934	.4384	50.00	16.32	.4133	569.0	.3912-02
34	32.600	.79500-01	137.00	.3768	.4542	.5062	50.01	18.85	.4131	568.7	.4516-02
33	32.600	.80800-01	176.00	.3778	.4550	.5068	51.36	19.40	.4110	579.0	.4595-02
34	32.700	.67400-01	132.00	.4294	.5176	.5769	50.00	21.47	.4133	569.0	.5147-02
34	32.700	.72400-01	134.00	.4208	.5072	.5652	50.02	21.05	.4131	568.7	.5043-02
34	32.800	.65700-01	130.00	.4449	.5363	.5976	50.04	22.26	.4129	568.4	.5332-02
33	32.800	.16680	210.00	.1215	.1462	.1628	51.67	6.280	.4076	574.3	.1477-02
32	32.800	.18880	225.00	.9148-01	.1099	.1223	50.73	4.641	.4045	558.6	.1100-02
32	32.800	.21170	239.00	.7910-01	.9511-01	.1058	50.61	4.004	.4059	560.4	.9517-03
34	32.900	.58600-01	118.00	.4918	.5928	.6607	50.01	24.60	.4131	568.7	.5895-02
34	32.900	.60400-01	122.00	.4330	.5218	.5814	50.07	21.68	.4125	567.8	.5189-02
33	32.900	.61300-01	171.00	.4219	.5081	.5658	51.43	21.70	.4103	578.0	.5131-02
34	33.000	.53500-01	115.00	.5097	.6144	.6847	50.02	25.50	.4130	568.6	.6109-02
34	33.200	.46800-01	111.00	.5293	.6381	.7113	49.95	26.44	.4139	569.8	.6345-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	33.400	.42800-01	166.00	.5885	.7092	.7903	51.22	30.14	.4126	581.3	.7161-02
34	33.500	.40100-01	99.000	.5983	.7216	.8045	49.87	29.84	.4147	571.0	.7175-02
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	33.600	.38300-01	97.000	.6100	.7359	.8206	49.81	30.38	.4155	572.0	.7316-02
34	33.700	.36700-01	96.000	.6360	.7673	.8556	49.80	31.68	.4155	572.0	.7629-02
34	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	34.700	.18700	227.00	.9283-01	.1116	.1242	50.64	4.701	.4056	560.0	.1117-02
32	34.700	.21010	240.00	.9143-01	.1099	.1223	50.59	4.625	.4061	560.8	.1100-02
33	34.900	.16480	212.00	.1330	.1601	.1782	51.61	6.865	.4083	575.3	.1617-02
33	35.100	.10000+00	148.00	.3027	.3646	.4061	51.37	15.55	.4109	578.9	.3682-02
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	35.300	.22100-01	160.00	.7234	.8730	.9736	50.88	36.81	.4163	586.6	.8813-02
34	35.300	.92500-01	145.00	.3215	.3875	.4318	50.01	16.08	.4131	568.7	.3853-02
32	35.400	.18800	231.00	.1095	.1316	.1464	50.67	5.548	.4052	559.5	.1317-02
33	35.500	.12100	196.00	.2338	.2815	.3135	51.44	12.03	.4101	577.8	.2843-02
33	35.600	.16580	216.00	.1387	.1669	.1858	51.55	7.148	.4089	576.1	.1685-02
34	35.800	.80600-01	138.00	.3517	.4240	.4725	50.00	17.59	.4133	569.0	.4216-02
32	35.900	.21310	247.00	.8602-01	.1034	.1150	50.68	4.360	.4050	559.3	.1035-02
32	36.000	.19040	235.00	.1153	.1387	.1542	50.67	5.845	.4052	559.5	.1387-02
34	36.200	.72400-01	135.00	.3344	.4030	.4490	50.09	16.75	.4123	567.6	.4007-02
33	36.200	.16810	220.00	.1427	.1717	.1912	51.58	7.360	.4086	575.6	.1734-02
33	36.300	.12200	200.00	.2323	.2797	.3115	51.44	11.95	.4102	577.9	.2824-02
34	36.600	.65700-01	131.00	.4356	.5251	.5852	50.00	21.78	.4133	568.9	.5222-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A105)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
32	36.700	.18700	226.00	.1137	.1367	.1520	50.66	5.760	.4053	559.6	.1368-02
33	36.900	.10110	187.00	.2988	.3598	.4007	51.45	15.37	.4101	577.7	.3634-02
33	36.900	.16480	211.00	.1416	.1704	.1897	51.62	7.311	.4081	575.0	.1721-02
34	37.000	.60400-01	123.00	.4566	.5502	.6131	50.07	22.86	.4125	567.8	.5471-02
33	37.000	.12440	204.00	.2293	.2761	.3075	51.44	11.79	.4102	577.9	.2788-02
34	37.100	.58600-01	119.00	.4784	.5769	.6430	49.94	23.89	.4140	569.9	.5736-02
32	37.200	.21310	246.00	.8532-01	.1026	.1141	50.68	4.324	.4050	559.3	.1026-02
32	37.300	.19040	234.00	.1143	.1374	.1528	50.62	5.783	.4058	560.3	.1374-02
34	37.600	.53500-01	116.00	.4903	.5911	.6588	49.96	24.50	.4137	569.5	.5877-02
33	37.600	.16810	219.00	.1425	.1716	.1910	51.51	7.341	.4094	576.7	.1733-02
33	37.800	.10270	150.00	.2927	.3527	.3929	51.32	15.02	.4115	579.8	.3561-02
33	37.900	.12100	195.00	.2351	.2831	.3154	51.36	12.07	.4110	579.0	.2859-02
33	38.000	.80300-01	179.00	.3735	.4499	.5013	51.30	19.16	.4117	580.0	.4543-02
34	38.500	.46800-01	112.00	.5266	.6349	.7077	49.94	26.30	.4140	569.9	.6313-02
33	38.600	.12440	203.00	.2278	.2744	.3056	51.38	11.70	.4108	578.8	.2771-02
33	38.700	.10000+00	185.00	.2303	.3495	.3893	51.42	14.93	.4104	578.1	.3530-02
34	38.900	.82200-01	141.00	.3495	.4214	.4696	50.01	17.48	.4132	568.9	.4190-02
34	39.300	.41600-01	104.00	.5680	.6853	.7642	49.79	28.29	.4156	572.2	.6814-02
33	39.500	.10270	190.00	.2938	.3537	.3938	51.50	15.13	.4095	577.0	.3572-02
33	39.600	.16810	218.00	.1389	.1672	.1862	51.52	7.155	.4093	576.7	.1689-02
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	39.900	.19040	233.00	.1128	.1356	.1509	50.65	5.714	.4054	559.7	.1357-02
33	40.100	.79500-01	177.00	.3710	.4468	.4977	51.36	19.05	.4111	579.2	.4512-02
33	40.200	.12440	202.00	.2267	.2730	.3040	51.43	11.66	.4103	578.1	.2757-02
32	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	41.100	.60700-01	173.00	.4395	.5295	.5898	51.32	22.55	.4115	579.8	.5346-02
34	41.100	.82200-01	142.00	.3587	.4324	.4819	50.00	17.93	.4133	569.0	.4299-02
33	42.300	.10270	189.00	.2894	.3485	.3881	51.44	14.89	.4102	577.9	.3520-02
33	42.600	.59600-01	172.00	.4652	.5606	.6246	51.26	23.85	.4122	580.7	.5660-02
33	43.200	.42000-01	168.00	.5113	.6164	.6871	51.13	26.14	.4136	582.7	.6224-02
33	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	43.600	.62900-01	128.00	.4171	.5028	.5604	50.00	20.86	.4133	569.0	.5000-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	45.000	.22900-01	8.0000	.9183	1.109	1.237	49.56	45.51	.4183	575.8	.1102-01
33	46.100	.62900-01	174.00	.4380	.5277	.5879	51.30	22.47	.4117	580.0	.5329-02
33	47.700	.40800-01	167.00	.5839	.7041	.7849	51.07	29.82	.4143	583.6	.7108-02
34	48.400	.44200-01	109.00	.5354	.6459	.7203	49.79	26.66	.4156	572.2	.6422-02
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FHIS, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A105)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
33	65.200	.24700-01	162.00	.7802	.9430	1.053	50.49	39.40	.4207	592.6	.9517-02
32	90.000	.91000-02	44.000	.6025	.7269	.8106	49.76	29.98	.4155	573.8	.7269-02
32	90.000	.11100-01	45.000	1.210	1.459	1.627	49.83	60.28	.4147	572.7	.1459-01
32	90.000	.13100-01	46.000	1.088	1.312	1.462	49.93	54.34	.4136	571.0	.1312-01
32	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	90.000	.17000-01	48.000	.8986	1.083	1.206	50.07	44.99	.4121	569.0	.1083-01
32	90.000	.20900-01	50.000	.8246	.9935	1.107	50.10	41.31	.4117	568.4	.9937-02
32	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	90.000	.26900-01	53.000	.6796	.8182	.9111	50.28	34.17	.4096	565.6	.8185-02
32	90.000	.28800-01	54.000	.6571	.7909	.8806	50.33	33.07	.4090	564.8	.7912-02
32	90.000	.32800-01	55.000	.3617	.4349	.4840	50.55	18.28	.4065	561.3	.4352-02
32	90.000	.36700-01	56.000	.5153	.6199	.6899	50.49	26.02	.4072	562.3	.6202-02
34	90.000	.40600-01	57.000	.5153	.6223	.6945	49.53	25.52	.4187	576.4	.6186-02
34	90.000	.48500-01	58.000	.4632	.5591	.6236	49.68	23.01	.4169	574.0	.5558-02
34	90.000	.56400-01	59.000	.4308	.5199	.5799	49.71	21.42	.4166	573.5	.5169-02
34	90.000	.76100-01	60.000	.3414	.4120	.4596	49.72	16.98	.4164	573.3	.4096-02
34	90.000	.95800-01	61.000	.2636	.3181	.3549	49.69	13.10	.4168	573.8	.3163-02
34	90.000	.11550	62.000	.2047	.2472	.2759	49.50	10.13	.4189	576.7	.2457-02
32	135.00	.19000-01	49.000	.8129	.9789	1.090	50.22	40.82	.4103	566.6	.9792-02
32	135.00	.22900-01	51.000	.7603	.9152	1.019	50.32	38.26	.4092	565.0	.9156-02
32	180.00	.91000-02	23.000	.1962	.2367	.2640	49.72	9.752	.4160	574.4	.2367-02
32	180.00	.11100-01	24.000	.6549	.7889	.8787	50.15	32.85	.4111	567.6	.7891-02
32	180.00	.13100-01	25.000	1.227	1.477	1.644	50.37	61.80	.4086	564.1	.1477-01
32	180.00	.15000-01	26.000	1.165	1.402	1.560	50.45	58.78	.4077	562.9	.1402-01
32	180.00	.17000-01	27.000	.8634	1.038	1.155	50.59	43.68	.4061	560.8	.1039-01
32	180.00	.19000-01	28.000	.8217	.9881	1.099	50.59	41.58	.4060	560.7	.9886-02
32	180.00	.20900-01	29.000	.7942	.9546	1.062	50.69	40.26	.4050	559.2	.9552-02
32	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	180.00	.28800-01	32.000	.6465	.7764	.8632	50.91	32.91	.4025	555.8	.7770-02
32	180.00	.32800-01	33.000	.5661	.6797	.7555	50.96	28.85	.4019	554.9	.6803-02
33	180.00	.36700-01	34.000	.5402	.6498	.7231	51.72	27.94	.4071	573.5	.6563-02
33	180.00	.40600-01	35.000	.4788	.5758	.6408	51.75	24.78	.4067	573.0	.5816-02
33	180.00	.48500-01	36.000	.4229	.5086	.5660	51.73	21.87	.4070	573.3	.5137-02
33	180.00	.56400-01	37.000	.3866	.4648	.5171	51.85	20.04	.4056	571.5	.4695-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
33	180.00	.95800-01	39.000	.2233	.2685	.2987	51.88	11.59	.4053	571.0	.2712-02
33	180.00	.11550	40.000	.1686	.2027	.2255	51.81	8.734	.4060	572.0	.2047-02
33	180.00	.16480	41.000	.8373-01	.1007	.1120	51.88	4.344	.4053	570.9	.1017-02
33	180.00	.18450	42.000	.5994-01	.7204-01	.8012-01	51.94	3.113	.4047	570.1	.7277-03
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	225.00	.22900-01	30.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	270.00	.91000-02	63.000	.6388	.7691	.8564	50.29	32.12	.4096	565.5	.7693-02
32	270.00	.11100-01	64.000	1.154	1.388	1.545	50.49	58.25	.4072	562.3	.1389-01

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A105)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
32	270.00	.13100-01	65.000	1.097	1.318	1.466	50.75	55.68	.4043	558.2	.1319-01
32	270.00	.17000-01	67.000	.9093	1.091	1.213	51.05	46.42	.4009	553.6	.1092-01
32	270.00	.20900-01	69.000	.8314	.9975	1.108	51.19	42.56	.3993	551.4	.9984-02
32	270.00	.24900-01	71.000	.7762	.9312	1.035	51.19	39.73	.3993	551.4	.9321-02
32	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	270.00	.28800-01	73.000	.6218	.7484	.8333	50.38	31.33	.4089	563.0	.7444-02
34	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	270.00	.36700-01	75.000	.5573	.6710	.7472	50.29	28.02	.4100	564.5	.6673-02
34	270.00	.40600-01	76.000	.5192	.6252	.6964	50.23	26.08	.4106	565.3	.6218-02
34	270.00	.48500-01	77.000	.4624	.5571	.6207	50.12	23.17	.4119	567.1	.5540-02
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
34	270.00	.76100-01	79.000	.3439	.4147	.4624	49.87	17.15	.4148	571.0	.4123-02
34	270.00	.95800-01	80.000	.2670	.3222	.3593	49.75	13.28	.4161	572.9	.3203-02
34	270.00	.11550	81.000	.2159	.2607	.2909	49.58	10.70	.4181	575.6	.2591-02
32	315.00	.15000-01	66.000	.9649	1.159	1.289	50.88	49.10	.4028	556.1	.1160-01
32	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	315.00	.22900-01	70.000	.7942	.9528	1.058	51.19	40.65	.3993	551.4	.9537-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A107)

E.T. OGIVE PARAMETRIC DATA

ALPHA = -5.000 BETA = 6.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
50	-5.000	-6.000	5.300	.4816+07	405.5	1332.	325.8	.5340	205.1	.2184-03	3721.	.2750-01
51	-5.000	-6.000	5.300	.4834+07	405.8	1330.	325.1	.5344	204.7	.2190-03	3717.	.2750-01
52	-5.000	-6.000	5.300	.5087+07	405.1	1286.	314.0	.5347	197.7	.2269-03	3653.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
50	.0000	.2580
51	.0000	.2581
52	.0000	.2572

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
52	.00000	.91000-02	1.0000	.8657	1.056	1.187	44.67	38.67	.4460	583.6	.1017-01
52	.00000	.11100-01	2.0000	1.041	1.268	1.424	44.97	46.80	.4424	578.9	.1221-01
52	.00000	.13100-01	3.0000	.7879	.9573	1.072	45.61	35.94	.4346	568.7	.9222-02
52	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	.00000	.17000-01	5.0000	.8769	1.065	1.193	45.68	40.06	.4337	567.6	.1026-01
52	.00000	.19000-01	6.0000	.8192	.9944	1.114	45.78	37.50	.4326	566.2	.9581-02
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	.00000	.24900-01	9.0000	.7075	.8581	.9603	45.98	32.53	.4302	562.9	.8268-02
52	.00000	.26900-01	10.000	.6831	.8284	.9269	46.03	31.44	.4296	562.2	.7982-02
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	.00000	.32800-01	12.000	.6190	.7443	.8281	49.90	30.89	.4061	551.3	.7342-02
50	.00000	.36700-01	13.000	.5220	.6275	.6980	49.98	26.09	.4052	550.2	.6190-02
50	.00000	.40600-01	14.000	.5700	.6855	.7627	49.90	28.44	.4061	551.4	.6762-02
50	.00000	.48500-01	15.000	.4883	.5873	.6536	49.85	24.35	.4066	552.1	.5793-02
50	.00000	.56400-01	16.000	.4703	.5656	.6295	49.80	23.42	.4073	552.9	.5579-02
50	.00000	.76100-01	17.000	.3953	.4758	.5297	49.66	19.63	.4089	555.1	.4693-02
50	.00000	.95800-01	18.000	.3283	.3954	.4404	49.52	16.26	.4104	557.2	.3899-02
50	.00000	.11550	19.000	.2669	.3217	.3584	49.33	13.16	.4127	560.3	.3172-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A107)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
50	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	.00000	.21400	22.000	.9011-01	.1085	.1209	49.45	4.456	.4112	558.3	.1070-02
51	2.0000	.24700-01	165.00	.6839	.8241	.9182	49.29	33.71	.4121	558.4	.8113-02
51	9.0000	.15000-01	157.00	.8272	.9967	1.111	49.28	40.76	.4123	558.6	.9813-02
51	9.0000	.17600-01	158.00	.9102	1.096	1.221	49.43	44.99	.4105	556.3	.1079-01
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	9.8000	.24700-01	164.00	.7445	.8963	.9980	49.51	36.86	.4096	555.0	.8825-02
52	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	10.000	.30800-01	92.000	.6793	.8236	.9215	46.05	31.28	.4293	561.8	.7937-02
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	14.600	.44200-01	169.00	.5501	.6621	.7372	49.58	27.27	.4088	553.9	.6520-02
52	18.500	.44200-01	106.00	.5560	.6743	.7545	46.01	25.58	.4299	562.5	.6497-02
51	19.600	.62900-01	175.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	19.800	.40900-01	101.00	.6047	.7333	.8205	46.01	27.82	.4298	562.4	.7066-02
52	20.000	.24900-01	89.000	.7795	.9461	1.059	45.83	35.73	.4320	565.3	.9115-02
52	20.000	.28800-01	91.000	.7362	.8930	.9994	45.97	33.84	.4303	563.1	.8605-02
52	20.000	.32800-01	93.000	.6836	.8290	.9276	46.01	31.45	.4298	562.5	.7988-02
51	21.800	.82200-01	182.00	.3985	.4801	.5348	49.35	19.67	.4114	557.4	.4726-02
52	22.200	.62900-01	125.00	.4712	.5714	.6395	45.99	21.67	.4301	562.8	.5506-02
52	22.400	.44200-01	107.00	.5706	.6919	.7741	46.05	26.28	.4293	561.8	.6667-02
51	22.600	.10270	192.00	.3230	.3892	.4337	49.29	15.92	.4122	558.5	.3832-02
52	23.000	.42000-01	105.00	.5902	.7157	.8009	46.01	27.16	.4298	562.4	.6896-02
52	23.400	.59600-01	120.00	.4833	.5861	.6559	46.00	22.23	.4300	562.7	.5648-02
50	23.900	.21310	250.00	.1015	.1223	.1362	49.51	5.027	.4106	557.4	.1206-02
52	24.100	.82200-01	139.00	.3974	.4823	.5400	45.83	18.21	.4320	565.3	.4647-02
51	24.400	.12440	207.00	.2709	.3268	.3644	49.02	13.28	.4152	562.6	.3217-02
50	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	24.800	.16810	223.00	.1760	.2120	.2360	49.58	8.728	.4098	556.3	.2090-02
52	24.900	.62900-01	125.00	.4780	.5796	.6486	46.01	21.99	.4298	562.5	.5585-02
51	25.000	.79500-01	178.00	.4114	.4955	.5519	49.41	20.33	.4107	556.5	.4879-02
51	25.300	.10000+00	186.00	.3386	.4080	.4547	49.26	16.68	.4125	558.9	.4017-02
51	25.300	.10270	191.00	.3314	.3993	.4449	49.29	16.34	.4121	558.4	.3931-02
52	25.500	.60700-01	124.00	.4901	.5943	.6649	46.05	22.57	.4293	561.8	.5726-02
51	26.000	.12440	206.00	.2706	.3264	.3639	49.05	13.28	.4149	562.1	.3213-02
52	26.300	.82200-01	140.00	.3780	.4587	.5136	45.83	17.32	.4320	565.3	.4420-02
51	26.700	.12100	199.00	.2744	.3309	.3688	49.13	13.48	.4140	560.9	.3257-02
50	26.800	.16810	222.00	.1700	.2046	.2279	49.59	8.428	.4097	556.2	.2018-02
50	27.000	.19040	237.00	.1349	.1625	.1810	49.55	6.686	.4101	556.8	.1603-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A107)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
50	27.100	.21310	249.00	.9379-01	.1129	.1256	49.70	4.661	.4084	554.5	.1113-02
51	27.200	.80300-01	180.00	.4159	.5009	.5580	49.37	20.53	.4112	557.1	.4932-02
51	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	27.400	.40100-01	98.000	.5614	.6808	.7618	46.00	25.82	.4299	562.6	.6560-02
51	27.400	.16480	215.00	.1709	.2061	.2298	49.01	8.374	.4154	562.9	.2029-02
52	27.600	.41600-01	102.00	.6146	.7453	.8340	46.02	28.28	.4298	562.4	.7182-02
51	27.600	.12440	205.00	.2724	.3286	.3663	49.04	13.36	.4150	562.4	.3234-02
50	27.600	.18700	230.00	.1285	.1548	.1724	49.53	6.366	.4104	557.2	.1526-02
50	27.700	.21010	243.00	.1095	.1319	.1468	49.60	5.432	.4096	556.1	.1300-02
51	27.900	.10110	188.00	.3323	.4005	.4463	49.24	16.36	.4127	559.2	.3943-02
52	28.000	.46800-01	110.00	.5569	.6754	.7558	46.00	25.62	.4300	562.6	.6508-02
50	28.200	.16810	221.00	.1775	.2136	.2379	49.61	8.804	.4094	555.9	.2107-02
51	28.300	.12200	201.00	.2771	.3341	.3725	49.10	13.30	.4143	561.4	.3289-02
50	28.300	.19040	236.00	.1242	.1495	.1665	49.59	6.159	.4097	556.3	.1475-02
52	28.400	.53500-01	114.00	.5319	.6450	.7216	46.05	24.50	.4293	561.8	.6215-02
50	28.400	.21310	248.00	.9771-01	.1176	.1309	49.73	4.859	.4080	553.9	.1160-02
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	28.800	.60400-01	121.00	.4902	.5943	.6650	46.05	22.57	.4293	561.8	.5727-02
51	28.800	.16580	217.00	.1654	.1996	.2225	49.04	8.114	.4150	562.3	.1964-02
50	28.900	.18800	232.00	.1237	.1489	.1659	49.53	6.126	.4103	557.1	.1469-02
52	29.000	.65700-01	129.00	.4773	.5788	.6477	46.01	21.96	.4299	562.5	.5577-02
50	29.000	.21110	244.00	.9548-01	.1149	.1279	49.68	4.743	.4087	554.9	.1133-02
52	29.200	.72400-01	133.00	.4398	.5336	.5973	45.91	20.19	.4310	564.0	.5142-02
52	29.300	.79500-01	136.00	.3976	.4823	.5398	45.96	18.28	.4304	563.2	.4647-02
52	29.600	.92500-01	143.00	.3659	.4442	.4974	45.78	16.75	.4326	566.0	.4280-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	29.900	.12100	198.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	30.200	.16480	214.00	.1512	.1824	.2033	49.06	7.417	.4148	562.1	.1795-02
50	30.200	.18700	229.00	.1186	.1428	.1590	49.57	5.880	.4099	556.5	.1408-02
50	30.300	.21010	242.00	.1015	.1221	.1359	49.67	5.039	.4087	554.9	.1204-02
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	31.500	.11100-01	83.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	32.100	.21010	241.00	.1021	.1229	.1368	49.68	5.074	.4086	554.8	.1212-02
51	32.200	.16480	213.00	.1545	.1864	.2078	49.07	7.583	.4146	561.8	.1834-02
50	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	32.200	.18700	228.00	.1327	.1598	.1779	49.60	6.584	.4095	556.0	.1576-02
51	32.300	.12100	197.00	.2806	.3382	.3770	49.17	13.79	.4135	560.3	.3330-02
51	32.300	.12300	194.00	.2579	.3110	.3466	49.14	12.67	.4139	560.8	.3061-02
51	32.300	.12730	208.00	.2591	.3124	.3482	49.13	12.73	.4140	560.9	.3075-02

FH:6, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A107)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
51	32.300	.13420	209.00	.2468	.2975	.3316	49.15	12.13	.4137	560.6	.2929-02
51	32.400	.10000+00	147.00	.3454	.4162	.4637	49.31	17.03	.4119	558.1	.4097-02
51	32.400	.10110	184.00	.3383	.4077	.4542	49.29	16.68	.4121	558.4	.4014-02
51	32.400	.10630	193.00	.3256	.3923	.4371	49.33	16.06	.4117	557.9	.3862-02
51	32.500	.85800-01	183.00	.4023	.4845	.5397	49.43	19.89	.4105	556.3	.4771-02
52	32.500	.92500-01	144.00	.3633	.4410	.4939	45.77	16.63	.4327	566.2	.4249-02
52	32.600	.79500-01	137.00	.4095	.4969	.5562	45.90	18.80	.4311	564.1	.4788-02
51	32.600	.80800-01	176.00	.4181	.5035	.5607	49.46	20.68	.4101	555.7	.4957-02
52	32.700	.67400-01	132.00	.4667	.5660	.6335	45.97	21.45	.4303	563.1	.5454-02
52	32.700	.72400-01	134.00	.4525	.5488	.6141	45.99	20.81	.4301	562.9	.5288-02
52	32.800	.65700-01	130.00	.4770	.5785	.6474	45.99	21.94	.4301	562.8	.5574-02
51	32.800	.16680	210.00	.1542	.1859	.2071	49.21	7.587	.4131	559.7	.1830-02
50	32.800	.18880	225.00	.1149	.1383	.1540	49.60	5.637	.4095	556.0	.1364-02
50	32.800	.21170	239.00	.1008	.1213	.1351	49.59	4.997	.4097	556.3	.1197-02
52	32.900	.58600-01	118.00	.5196	.6300	.7048	46.05	23.93	.4293	561.8	.6070-02
52	32.900	.60400-01	122.00	.4989	.5685	.6360	46.06	21.60	.4292	561.7	.5478-02
51	32.900	.61300-01	171.00	.4657	.5606	.6242	49.52	23.06	.4094	554.8	.5520-02
52	33.000	.53500-01	115.00	.5397	.6543	.7321	46.07	24.87	.4291	561.5	.6305-02
52	33.200	.46800-01	111.00	.5549	.6728	.7527	46.06	25.56	.4292	561.7	.6483-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	33.400	.42800-01	166.00	.5935	.7144	.7954	49.54	29.40	.4093	554.5	.7034-02
52	33.500	.40100-01	99.000	.6024	.7306	.8176	45.99	27.70	.4301	562.8	.7040-02
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	33.600	.38300-01	97.000	.6274	.7609	.8515	45.98	28.84	.4302	563.0	.7332-02
52	33.700	.36700-01	96.000	.6618	.8027	.8983	45.98	30.43	.4302	563.0	.7735-02
52	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	34.700	.18700	227.00	.1148	.1383	.1541	49.46	5.679	.4112	558.3	.1364-02
50	34.700	.21010	240.00	.1146	.1380	.1538	49.41	5.661	.4118	559.0	.1361-02
51	34.900	.16480	212.00	.1691	.2040	.2274	49.10	8.304	.4144	561.5	.2008-02
51	35.100	.10000+00	148.00	.3487	.4201	.4679	49.37	17.22	.4112	557.2	.4136-02
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	35.300	.22100-01	160.00	.7798	.9396	1.047	49.30	38.45	.4120	558.2	.9251-02
52	35.300	.92500-01	145.00	.3633	.4410	.4937	45.83	16.65	.4320	565.3	.4249-02
50	35.400	.18800	231.00	.1382	.1664	.1853	49.61	6.857	.4094	555.8	.1641-02
51	35.500	.12100	196.00	.2759	.3326	.3706	49.21	13.58	.4131	559.7	.3274-02
51	35.600	.16500	216.00	.1733	.2087	.2338	49.09	8.577	.4144	561.5	.2064-02
52	35.800	.80600-01	138.00	.3914	.4748	.5315	45.90	17.97	.4311	564.1	.4575-02
50	35.900	.21310	247.00	.1126	.1354	.1507	49.75	5.599	.4078	553.7	.1336-02
50	36.000	.19040	235.00	.1438	.1731	.1927	49.61	7.132	.4095	555.9	.1707-02
52	36.200	.72400-01	135.00	.3808	.4616	.5164	46.08	17.54	.4290	561.4	.4448-02
51	36.200	.16810	220.00	.1780	.2147	.2393	49.14	8.749	.4139	560.8	.2113-02
51	36.300	.12200	200.00	.2758	.3325	.3705	49.21	13.57	.4131	559.7	.3273-02
52	36.600	.65700-01	131.00	.4825	.5853	.6550	45.96	22.18	.4304	563.2	.5640-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A107)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
50	36.700	.18700	226.00	.1422	.1712	.1906	49.61	7.054	.4095	555.9	.1688-02
51	36.900	.10110	187.00	.3485	.4198	.4676	49.37	17.21	.4112	557.2	.4133-02
51	36.900	.16480	211.00	.1781	.2147	.2393	49.16	8.753	.4136	560.4	.2113-02
52	37.000	.60400-01	123.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	37.000	.12440	204.00	.2735	.3297	.3675	49.15	13.44	.4138	560.7	.3246-02
52	37.100	.58600-01	119.00	.5196	.6302	.7052	45.99	23.90	.4301	562.8	.6072-02
50	37.200	.21310	246.00	.1121	.1349	.1501	49.77	5.579	.4076	553.4	.1330-02
50	37.300	.19040	234.00	.1431	.1723	.1919	49.60	7.099	.4096	556.1	.1699-02
52	37.600	.53500-01	116.00	.5336	.6471	.7242	46.00	24.55	.4300	562.6	.6236-02
51	37.600	.16810	219.00	.1801	.2172	.2421	49.13	8.850	.4140	560.9	.2138-02
51	37.800	.10270	150.00	.3460	.4169	.4645	49.29	17.05	.4121	558.4	.4104-02
51	37.900	.12100	195.00	.2819	.3398	.3787	49.23	13.88	.4128	559.4	.3345-02
51	38.000	.80300-01	179.00	.4321	.5203	.5794	49.49	21.38	.4099	555.3	.5123-02
52	38.500	.46800-01	112.00	.5563	.6746	.7549	46.02	25.60	.4297	562.4	.6501-02
51	38.600	.12440	203.00	.2727	.3288	.3665	49.15	13.40	.4138	560.7	.3237-02
51	38.700	.10000+00	185.00	.3360	.4049	.4510	49.34	16.58	.4116	557.7	.3986-02
52	38.900	.82200-01	141.00	.4048	.4911	.5497	45.90	18.58	.4311	564.1	.4732-02
52	39.300	.41600-01	104.00	.5979	.7254	.8120	45.91	27.45	.4310	564.0	.6990-02
51	39.500	.10270	190.00	.3538	.4262	.4747	49.39	17.48	.4110	556.8	.4196-02
51	39.600	.16810	218.00	.1791	.2160	.2407	49.15	8.804	.4138	560.7	.2126-02
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	39.900	.19040	233.00	.1349	.1624	.1808	49.66	6.698	.4089	555.2	.1601-02
51	40.100	.79500-01	177.00	.4358	.5247	.5842	49.52	21.58	.4095	554.9	.5166-02
51	40.200	.12440	202.00	.2745	.3309	.3688	49.15	13.49	.4137	560.6	.3257-02
50	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	41.100	.60700-01	173.00	.5037	.6064	.6752	49.52	24.94	.4095	554.8	.5971-02
52	41.100	.82200-01	142.00	.4207	.5104	.5714	45.90	19.31	.4311	564.1	.4918-02
51	42.300	.10270	189.00	.3512	.4230	.4712	49.39	17.34	.4110	556.9	.4165-02
51	42.600	.59600-01	172.00	.5225	.6291	.7005	49.52	25.87	.4095	554.9	.6194-02
51	43.200	.42000-01	168.00	.5537	.6666	.7422	49.52	27.42	.4095	554.8	.6563-02
51	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	43.600	.62900-01	128.00	.4732	.5740	.6424	45.98	21.76	.4302	563.0	.5531-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	45.000	.22900-01	8.0000	.9404	1.144	1.283	45.27	42.57	.4387	574.1	.1102-01
51	46.100	.62900-01	174.00	.5050	.6079	.6769	49.52	25.01	.4095	554.8	.5986-02
51	47.700	.40800-01	167.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	48.400	.44200-01	109.00	.5917	.7180	.8039	45.86	27.13	.4317	564.9	.6918-02
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH15, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A107)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
51	65.200	.24700-01	162.00	.8078	.9748	1.087	48.92	39.52	.4164	564.2	.9595-02
50	90.000	.91000-02	44.000	1.069	1.296	1.450	47.90	51.19	.4292	582.7	.1276-01
50	90.000	.11100-01	45.000	1.148	1.390	1.555	48.08	55.18	.4271	579.8	.1370-01
50	90.000	.13100-01	46.000	1.120	1.356	1.516	48.28	54.09	.4248	576.8	.1336-01
50	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	90.000	.17000-01	48.000	.9094	1.100	1.230	48.35	43.97	.4240	575.6	.1084-01
50	90.000	.20900-01	50.000	.7985	.9658	1.079	48.48	38.71	.4225	573.6	.9518-02
50	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	90.000	.26900-01	53.000	.7087	.8565	.9562	48.64	34.47	.4206	571.0	.8441-02
50	90.000	.28800-01	54.000	.7068	.8540	.9533	48.72	34.43	.4197	569.9	.8418-02
50	90.000	.32800-01	55.000	.3991	.4818	.5375	48.92	19.52	.4174	566.7	.4750-02
50	90.000	.36700-01	56.000	.5741	.6932	.7733	48.88	28.06	.4178	567.2	.6833-02
52	90.000	.40600-01	57.000	.6168	.7513	.8432	45.05	27.79	.4414	577.6	.7235-02
52	90.000	.48500-01	58.000	.5292	.6440	.7223	45.25	23.94	.4390	574.4	.6202-02
52	90.000	.56400-01	59.000	.4930	.6000	.6729	45.25	22.31	.4389	574.4	.5778-02
52	90.000	.76100-01	60.000	.4046	.4924	.5523	45.23	18.30	.4392	574.7	.4742-02
52	90.000	.95800-01	61.000	.3315	.4036	.4528	45.13	14.96	.4404	576.3	.3887-02
52	90.000	.11550	62.000	.2690	.3277	.3678	45.04	12.12	.4415	577.8	.3156-02
50	135.00	.19000-01	49.000	.8042	.9742	1.089	48.09	38.68	.4269	579.6	.9598-02
50	135.00	.22900-01	51.000	.7237	.8763	.9796	48.19	34.87	.4258	578.1	.8634-02
50	180.00	.91000-02	23.000	.3134	.3803	.4257	47.72	14.96	.4313	585.5	.3746-02
50	180.00	.11100-01	24.000	.7368	.8930	.9989	47.97	35.35	.4283	581.5	.8798-02
50	180.00	.13100-01	25.000	1.038	1.258	1.406	48.12	49.96	.4266	579.3	.1239-01
50	180.00	.15000-01	26.000	.9801	1.187	1.327	48.17	47.21	.4260	578.4	.1169-01
50	180.00	.17000-01	27.000	.7785	.9425	1.054	48.22	37.54	.4254	577.6	.9287-02
50	180.00	.19000-01	28.000	.7664	.9277	1.037	48.26	36.99	.4250	577.0	.9142-02
50	180.00	.20900-01	29.000	.7395	.8950	1.000	48.31	35.73	.4244	576.2	.8820-02
50	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	180.00	.28800-01	32.000	.5989	.7241	.8086	48.55	29.08	.4216	572.4	.7136-02
50	180.00	.32800-01	33.000	.5247	.6341	.7078	48.68	25.54	.4202	570.5	.6250-02
51	180.00	.36700-01	34.000	.5212	.6292	.7019	48.84	25.45	.4174	565.5	.6193-02
51	180.00	.40600-01	35.000	.4617	.5575	.6220	48.79	22.53	.4179	566.2	.5487-02
51	180.00	.48500-01	36.000	.4059	.4903	.5472	48.70	19.77	.4189	567.6	.4825-02
51	180.00	.56400-01	37.000	.3768	.4548	.5074	48.86	18.41	.4171	565.1	.4477-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
51	180.00	.95800-01	39.000	.2239	.2703	.3016	48.85	10.94	.4172	565.3	.2661-02
51	180.00	.11550	40.000	.1678	.2027	.2262	48.69	8.172	.4191	567.8	.1995-02
51	180.00	.16480	41.000	.8460-01	.1022	.1141	48.62	4.113	.4199	569.0	.1006-02
51	180.00	.18450	42.000	.6307-01	.7613-01	.8493-01	48.85	3.081	.4172	565.3	.7493-03
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	270.00	.[illegible]000-01	30.000	.6902	.8329	.9288	49.03	33.85	.4161	564.9	.8211-02
50	270.00	.91000-02	63.000	.4425	.5353	.5980	48.41	21.42	.4232	574.6	.5275-02
50	270.00	.11100-01	64.000	.6864	.8296	.9263	48.63	33.38	.4208	571.3	.8177-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A107)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
50	270.00	.13100-01	65.000	1.030	1.243	1.387	48.92	50.38	.4174	566.7	.1226-01
50	270.00	.17000-01	67.000	.7702	.9282	1.034	49.35	38.01	.4124	560.0	.9153-02
50	270.00	.20900-01	69.000	.7337	.8833	.9836	49.60	36.39	.4096	556.1	.8711-02
50	270.00	.24900-01	71.000	.6880	.8281	.9220	49.66	34.17	.4089	555.1	.8167-02
50	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	270.00	.28800-01	73.000	.5683	.6890	.7708	46.08	26.19	.4290	561.4	.6639-02
52	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	270.00	.36700-01	75.000	.5041	.6110	.6835	46.12	23.25	.4285	560.8	.5888-02
52	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	270.00	.48500-01	77.000	.4023	.4878	.5457	46.06	18.53	.4292	561.7	.4700-02
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
52	270.00	.76100-01	79.000	.2846	.3453	.3865	45.90	13.06	.4312	564.2	.3327-02
52	270.00	.95800-01	80.000	.2115	.2568	.2876	45.75	9.678	.4329	566.5	.2474-02
52	270.00	.11550	81.000	.1614	.1961	.2198	45.52	7.346	.4357	570.1	.1889-02
50	315.00	.15000-01	66.000	.8574	1.033	1.151	49.36	42.32	.4123	559.7	.1019-01
50	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
50	315.00	.22900-01	70.000	.7089	.8528	.9490	49.81	35.31	.4071	552.7	.8411-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A112)

E.T. OGIVE PARAMETRIC DATA

ALPHA = .0000 BETA = -6.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
38	.0000	-6.000	5.300	.4780+07	405.0	1337.	327.1	.5330	206.0	.2171-03	3728.	.2750-01
39	.0000	-6.000	5.300	.5032+07	405.2	1295.	316.3	.5347	199.2	.2252-03	3666.	.2750-01
40	.0000	-6.000	5.300	.5014+07	406.0	1300.	317.5	.5356	199.9	.2248-03	3673.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
38	.0000	.2579
39	.0000	.2574
40	.0000	.2578

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
40	.00000	.91000-02	1.0000	.5629	.6878	.7737	44.94	25.30	.4496	594.9	.6658-02
40	.00000	.11100-01	2.0000	.9682	1.183	1.330	45.04	43.61	.4484	593.3	.1145-01
40	.00000	.13100-01	3.0000	.6473	.7886	.8852	45.59	29.51	.4419	584.7	.7637-02
40	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	.00000	.17000-01	5.0000	.8045	.9819	1.104	45.20	36.36	.4465	590.9	.9507-02
40	.00000	.19000-01	6.0000	.7921	.9666	1.086	45.23	35.83	.4461	590.3	.9358-02
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	.00000	.24900-01	9.0000	.6799	.8289	.9309	45.43	30.89	.4437	587.1	.8026-02
40	.00000	.26900-01	10.000	.6391	.7790	.8748	45.47	29.06	.4433	586.6	.7544-02
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	.00000	.32800-01	12.000	.5544	.6693	.7466	49.11	27.23	.4172	568.7	.6619-02
38	.00000	.36700-01	13.000	.4657	.5618	.6264	49.27	22.94	.4154	566.3	.5557-02
38	.00000	.40600-01	14.000	.5175	.6245	.6965	49.19	25.45	.4163	567.6	.6177-02
38	.00000	.48500-01	15.000	.4527	.5461	.6090	49.27	22.30	.4154	566.3	.5402-02
38	.00000	.56400-01	16.000	.4368	.5269	.5875	49.28	21.52	.4153	566.1	.5211-02
38	.00000	.76100-01	17.000	.3319	.4002	.4462	49.34	16.37	.4146	565.2	.3959-02
38	.00000	.95800-01	18.000	.2646	.3192	.3558	49.33	13.05	.4147	565.3	.3157-02
38	.00000	.11550	19.000	.2113	.2551	.2846	49.10	10.38	.4174	569.0	.2523-02

FH16, ARC 3.5-237, ET NOSE (CLEAN)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HU/HREF	HW/HT	TW DEG. R	STN NO R=0.9
38	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	.00000	.21400	22.000	.6174-01	.7444-01	.8298-01	49.39	3.049	.4140	564.3	.7363-03	
39	2.0000	.24700-01	165.00	.6171	.7513	.8430	45.51	28.09	.4401	580.2	.7267-02	
39	9.0000	.15000-01	157.00	.7157	.8719	.9787	45.38	32.48	.4417	582.3	.8433-02	
0	9.0000	.17600-01	158.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
39	9.8000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
40	10.000	.24700-01	164.00	.6703	.8173	.9180	45.18	30.28	.4441	585.4	.7904-02	
0	10.000	.22900-01	89.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
40	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
0	10.000	.30800-01	92.000	.5804	.7074	.7943	45.49	26.40	.4430	586.2	.6850-02	
0	12.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
0	13.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
39	14.600	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
40	18.500	.44200-01	169.00	.4634	.5390	.6042	45.82	20.32	.4364	575.4	.5215-02	
39	19.600	.62900-01	106.00	.4529	.5515	.6189	45.67	20.68	.4409	583.4	.5341-02	
40	19.800	.40800-01	175.00	.3552	.4315	.4835	45.96	16.33	.4348	573.2	.4175-02	
40	20.000	.24900-01	101.00	.4848	.5906	.6630	45.60	22.11	.4417	584.5	.5720-02	
40	20.000	.28800-01	89.000	.6904	.8425	.9469	45.22	31.22	.4462	590.5	.8157-02	
40	20.000	.32800-01	91.000	.6025	.7345	.8249	45.43	27.37	.4438	587.2	.7113-02	
39	21.800	.82700-01	93.000	.5476	.6675	.7495	45.48	24.90	.4432	586.5	.6463-02	
40	22.200	.62900-01	182.00	.2767	.3361	.3765	46.02	12.73	.4341	572.3	.3252-02	
40	22.400	.44200-01	125.00	.3665	.4459	.5000	45.92	16.83	.4379	579.5	.4319-02	
39	22.600	.10270	107.00	.4558	.5550	.6227	45.72	20.84	.4403	582.7	.5375-02	
40	23.000	.42000-01	192.00	.2112	.2565	.2873	46.08	9.734	.4333	571.3	.2482-02	
40	23.400	.59600-01	105.00	.4674	.5693	.6389	45.65	21.34	.4412	583.8	.5513-02	
38	23.900	.21310	120.00	.3746	.4557	.5111	45.89	17.19	.4383	580.0	.4414-02	
40	24.100	.82200-01	250.00	.4805-01	.5794-01	.6458-01	49.39	2.373	.4140	564.3	.5731-03	
39	24.400	.12440	139.00	.2823	.3433	.3850	45.94	12.97	.4377	579.2	.3326-02	
38	24.400	.19040	207.00	.1646	.2000	.2241	45.95	7.565	.4349	573.3	.1935-02	
38	24.800	.16810	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
40	24.900	.62900-01	223.00	.9392-01	.1133	.1264	49.19	4.620	.4163	567.5	.1121-02	
39	25.000	.79500-01	126.00	.3632	.4417	.4952	45.95	16.69	.4376	579.0	.4278-02	
39	25.300	.10000+00	178.00	.2888	.3508	.3930	46.00	13.28	.4343	572.5	.3394-02	
39	25.300	.10270	186.00	.2211	.2685	.3007	46.05	10.18	.4338	571.8	.2598-02	
40	25.500	.60700-01	191.00	.2147	.2606	.2919	46.11	9.897	.4331	570.9	.2522-02	
39	26.000	.12440	124.00	.3681	.4478	.5021	45.94	16.91	.4378	579.3	.4337-02	
40	26.300	.82200-01	206.00	.1608	.1954	.2190	45.95	7.391	.4349	573.3	.1891-02	
39	26.700	.12100	140.00	.2649	.3222	.3612	45.98	12.18	.4373	578.6	.3121-02	
38	26.800	.16810	199.00	.1649	.2003	.2244	46.03	7.591	.4340	572.2	.1938-02	
38	27.000	.19040	222.00	.8543-01	.1031	.1150	49.21	4.204	.4160	567.1	.1019-02	
			237.00	.6530-01	.7874-01	.8777-01	49.38	3.225	.4141	564.5	.7789-03	

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
38	27.100	.21310	249.00	.3968-01	.4784-01	.5333-01	49.41	1.961	.4137	564.0	.4733-03
39	27.200	.80300-01	180.00	.2866	.3481	.3900	46.01	13.19	.4342	572.4	.3368-02
39	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	27.400	.40100-01	98.000	.4293	.5227	.5865	45.73	19.64	.4402	582.4	.5062-02
39	27.400	.16480	215.00	.8296-01	.1007	.1128	46.08	3.823	.4333	571.3	.9747-03
40	27.600	.41600-01	102.00	.4740	.5771	.6476	45.72	21.67	.4403	582.7	.5589-02
39	27.600	.12440	205.00	.1606	.1951	.2186	46.01	7.390	.4342	572.4	.1888-02
38	27.600	.18700	230.00	.6264-01	.7553-01	.8420-01	49.37	3.092	.4142	564.7	.7471-03
38	27.700	.21010	243.00	.5175-01	.6241-01	.6957-01	49.36	2.554	.4144	564.9	.6173-03
39	27.900	.10110	188.00	.2116	.2569	.2877	46.08	9.749	.4333	571.3	.2486-02
40	28.000	.46800-01	110.00	.4262	.5189	.5822	45.73	19.49	.4402	582.5	.5026-02
38	28.200	.16810	221.00	.8595-01	.1037	.1156	49.24	4.233	.4157	566.7	.1026-02
39	28.300	.12200	201.00	.1665	.2023	.2266	46.02	7.664	.4341	572.2	.1957-02
38	28.300	.19040	236.00	.5552-01	.6694-01	.7462-01	49.41	2.743	.4138	564.1	.6622-03
40	28.400	.53500-01	114.00	.4034	.4909	.5506	45.84	18.49	.4389	580.8	.4755-02
38	28.400	.21310	248.00	.4544-01	.5478-01	.6105-01	49.46	2.248	.4131	563.2	.5419-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	28.800	.60400-01	121.00	.3586	.4362	.4890	45.95	16.48	.4376	579.0	.4225-02
39	28.800	.16580	217.00	.7646-01	.9284-01	.1040	46.10	3.525	.4331	571.0	.8983-03
38	28.900	.18800	232.00	.5805-01	.7096-01	.7910-01	49.39	2.907	.4140	564.3	.7019-03
40	29.000	.65700-01	129.00	.3482	.4234	.4747	45.98	16.01	.4372	578.5	.4102-02
38	29.000	.21110	244.00	.4611-01	.5559-01	.6196-01	49.41	2.278	.4138	564.1	.5499-03
40	29.200	.72400-01	133.00	.3106	.3778	.4236	45.95	14.27	.4376	579.0	.3660-02
40	29.300	.79500-01	136.00	.2736	.3327	.3729	46.02	12.59	.4367	577.9	.3223-02
40	29.600	.92500-01	143.00	.2470	.3004	.3368	45.97	11.35	.4374	578.8	.2909-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	29.900	.12100	198.00	.1625	.1973	.2210	46.05	7.481	.4338	571.8	.1909-02
39	30.200	.16480	214.00	.6897-01	.8374-01	.9378-01	46.10	3.179	.4331	571.0	.8103-03
38	30.200	.18700	229.00	.5559-01	.6702-01	.7470-01	49.41	2.746	.4138	564.1	.6630-03
38	30.300	.21010	242.00	.4682-01	.5645-01	.6292-01	49.41	2.314	.4137	564.0	.5584-03
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	31.500	.11100-01	83.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	32.100	.21010	241.00	.4665-01	.5625-01	.6270-01	49.38	2.303	.4141	564.6	.5564-03
39	32.200	.16480	213.00	.7228-01	.8776-01	.9829-01	46.09	3.332	.4332	571.1	.8492-03
38	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	32.200	.18700	228.00	.6064-01	.7312-01	.8151-01	49.38	2.994	.4141	564.6	.7233-03
39	32.300	.12100	197.00	.1646	.1999	.2239	46.05	7.580	.4338	571.9	.1934-02
39	32.300	.12300	194.00	.1515	.1840	.2061	46.01	6.970	.4342	572.4	.1780-02
39	32.300	.12730	208.00	.1474	.1790	.2005	46.05	6.786	.4337	571.8	.1732-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A112)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
39	32.300	.13420	209.00	.1375	.1669	.1868	46.18	6.348	.4322	569.8	.1615-02
39	32.400	.10000+00	147.00	.2168	.2632	.2948	46.08	9.990	.4333	571.3	.2547-02
39	32.400	.10110	184.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	32.400	.10630	193.00	.2023	.2456	.2751	46.10	9.326	.4331	571.0	.2377-02
39	32.500	.85800-01	183.00	.2582	.3136	.3513	46.03	11.89	.4340	572.1	.3035-02
40	32.500	.92500-01	144.00	.2376	.2889	.3239	45.96	10.92	.4375	578.9	.2799-02
40	32.600	.79500-01	137.00	.2787	.3389	.3799	46.01	12.82	.4369	578.1	.3283-02
39	32.600	.80800-01	176.00	.2736	.3323	.3723	46.01	12.59	.4342	572.4	.3215-02
40	32.700	.67400-01	132.00	.3294	.4006	.4492	45.94	15.13	.4378	579.3	.3881-02
40	32.700	.72400-01	134.00	.3144	.3824	.4287	45.95	14.45	.4376	579.0	.3704-02
40	32.800	.65700-01	130.00	.3406	.4142	.4644	45.98	15.66	.4372	578.5	.4013-02
39	32.800	.16680	210.00	.7157-01	.8688-01	.9729-01	46.16	3.304	.4325	570.1	.8407-03
38	32.800	.18880	225.00	.5254-01	.6334-01	.7060-01	49.42	2.536	.4137	564.0	.6266-03
38	32.800	.21170	239.00	.4638-01	.5601-01	.6250-01	49.02	2.274	.4182	570.2	.5539-03
40	32.900	.58600-01	118.00	.3775	.4592	.5149	45.93	17.34	.4378	579.3	.4448-02
40	32.900	.60400-01	122.00	.3335	.4055	.4546	46.02	15.35	.4367	577.9	.3928-02
39	32.900	.61300-01	171.00	.3239	.3934	.4407	46.03	14.91	.4339	572.1	.3806-02
40	33.000	.53500-01	115.00	.3952	.4807	.5390	45.94	18.16	.4377	579.2	.4657-02
40	33.200	.46800-01	111.00	.4251	.5174	.5803	45.84	19.49	.4389	580.8	.5011-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	33.400	.42800-01	166.00	.4417	.5369	.6018	45.85	20.25	.4361	574.9	.5195-02
40	33.500	.40100-01	99.000	.4628	.5634	.6321	45.75	21.17	.4400	582.2	.5456-02
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	33.600	.38300-01	97.000	.4811	.5858	.6572	45.72	22.00	.4403	582.7	.5673-02
40	33.700	.36700-01	96.000	.5085	.6192	.6949	45.67	23.22	.4409	583.5	.5997-02
40	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	34.700	.18700	227.00	.5153-01	.6215-01	.6928-01	49.33	2.542	.4147	565.3	.6147-03
38	34.700	.21010	240.00	.4767-01	.5751-01	.6413-01	49.24	2.347	.4157	566.7	.5688-03
39	34.900	.16480	212.00	.7889-01	.9579-01	.1073	46.09	3.636	.4333	571.2	.9269-03
39	35.100	.10000+00	148.00	.2153	.2614	.2928	46.08	9.919	.4334	571.3	.2529-02
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	35.300	.22100-01	160.00	.7027	.8550	.9588	45.66	32.09	.4384	577.9	.8270-02
40	35.300	.92500-01	145.00	.2325	.2827	.3168	46.05	10.71	.4364	577.5	.2738-02
38	35.400	.18800	231.00	.6258-01	.7545-01	.8410-01	49.40	3.091	.4139	564.2	.7463-03
39	35.500	.12100	196.00	.1598	.1941	.2174	46.05	7.361	.4337	571.8	.1878-02
39	35.600	.16580	216.00	.8327-01	.1011	.1132	46.10	3.838	.4331	571.0	.9783-03
40	35.800	.80600-01	138.00	.2552	.3103	.3478	46.02	11.75	.4367	577.9	.3006-02
38	35.900	.21310	247.00	.4483-01	.5405-01	.6025-01	49.41	2.215	.4138	564.1	.5347-03
38	36.000	.19040	235.00	.6383-01	.7695-01	.8577-01	49.41	3.153	.4138	564.1	.7612-03
40	36.200	.72400-01	135.00	.2503	.3042	.3410	46.10	11.54	.4358	576.7	.2947-02
39	36.200	.16810	220.00	.8488-01	.1030	.1154	46.16	3.918	.4325	570.1	.9971-03
39	36.300	.12200	200.00	.1572	.1909	.2138	46.04	7.236	.4338	571.9	.1847-02
40	36.600	.65700-01	131.00	.3321	.4039	.4529	45.96	15.26	.4375	578.9	.3913-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A112)

RUN NUMBER	PHETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
38	36.700	.18700	226.00	.6434-01	.7758-01	.8648-01	49.37	3.177	.4142	564.6	.7674-03
39	36.900	.10110	187.00	.2136	.2593	.2904	46.14	9.655	.4327	570.4	.2509-02
39	36.900	.16480	211.00	.8611-01	.1045	.1171	46.12	3.971	.4329	570.7	.1012-02
40	37.000	.60400-01	123.00	.3535	.4297	.4817	46.03	16.27	.4366	577.7	.4163-02
39	37.000	.12440	204.00	.1560	.1894	.2122	46.05	7.182	.4338	571.9	.1833-02
40	37.100	.58600-01	119.00	.3690	.4488	.5032	45.94	16.95	.4377	579.3	.4347-02
38	37.200	.21310	246.00	.4413-01	.5320-01	.5930-01	49.41	2.181	.4137	564.0	.5263-03
38	37.300	.19040	234.00	.6443-01	.7770-01	.8661-01	49.36	3.180	.4143	564.9	.7685-03
40	37.600	.53500-01	116.00	.3808	.4632	.5193	45.95	17.50	.4376	579.1	.4487-02
39	37.600	.16810	219.00	.8524-01	.1035	.1159	46.11	3.930	.4330	570.9	.1001-02
39	37.800	.10270	150.00	.2062	.2504	.2804	46.08	9.503	.4333	571.3	.2423-02
39	37.900	.12100	195.00	.1598	.1941	.2174	46.04	7.358	.4338	571.9	.1878-02
39	38.000	.80300-01	179.00	.2743	.3331	.3731	46.08	12.54	.4333	571.3	.3223-02
40	38.500	.46800-01	112.00	.4119	.5011	.5619	45.90	18.90	.4382	579.9	.4854-02
39	38.600	.12440	203.00	.1524	.1851	.2074	46.03	7.015	.4340	572.2	.1791-02
39	38.700	.10000+00	185.00	.2061	.2502	.2802	46.10	9.499	.4331	571.0	.2421-02
40	38.900	.82200-01	141.00	.2552	.3102	.3477	46.08	11.76	.4360	577.0	.3005-02
40	39.300	.41600-01	104.00	.4522	.5504	.6175	45.76	20.69	.4399	582.1	.5331-02
39	39.500	.10270	190.00	.2072	.2515	.2816	46.19	9.571	.4321	569.6	.2434-02
39	39.600	.16810	218.00	.8347-01	.1013	.1135	46.16	3.853	.4325	570.1	.9805-03
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	39.900	.19040	233.00	.6298-01	.7593-01	.8463-01	49.41	3.111	.4138	564.1	.7511-03
39	40.100	.79500-01	177.00	.2724	.3307	.3703	46.11	12.56	.4330	570.9	.3200-02
39	40.200	.12440	202.00	.1524	.1851	.2073	46.02	7.012	.4340	572.2	.1791-02
38	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	41.100	.60700-01	173.00	.3386	.4111	.4604	46.09	15.60	.4333	571.2	.3978-02
40	41.100	.82200-01	142.00	.2620	.3185	.3569	46.08	12.07	.4360	577.0	.3085-02
39	42.300	.10270	189.00	.2044	.2480	.2777	46.18	9.437	.4322	569.8	.2400-02
39	42.600	.59600-01	172.00	.3533	.4291	.4806	46.05	16.27	.4337	571.8	.4152-02
39	43.200	.42000-01	168.00	.4115	.4999	.5601	45.96	18.91	.4348	573.2	.4837-02
39	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	43.600	.62900-01	128.00	.3147	.3825	.4287	46.10	14.51	.4358	576.7	.3705-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	45.000	.22900-01	8.0000	.8553	1.044	1.174	45.11	38.59	.4475	592.2	.1011-01
39	46.100	.62900-01	174.00	.3322	.4034	.4517	46.11	15.22	.4330	570.8	.3903-02
39	47.700	.40800-01	167.00	.4617	.5610	.6286	45.92	21.20	.4353	573.8	.5428-02
40	48.400	.44200-01	109.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A112)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
39	65.200	.24700-01	162.00	.6717	.8163	.9148	45.89	30.82	.4356	574.3	.7898-02
38	90.000	.91000-02	44.000	.3293	.3981	.4446	48.75	16.05	.4214	574.5	.3936-02
38	90.000	.11100-01	45.000	.6923	.8362	.9333	48.96	33.89	.4190	571.2	.8270-02
38	90.000	.13100-01	46.000	1.150	1.388	1.549	49.14	56.52	.4169	568.4	.1373-01
38	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	90.000	.17000-01	48.000	.8075	.9738	1.086	49.35	39.85	.4145	565.1	.9632-02
38	90.000	.20900-01	50.000	.7456	.8987	1.002	49.46	36.88	.4131	563.2	.8890-02
38	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	90.000	.26900-01	53.000	.6381	.7686	.8562	49.65	31.68	.4110	560.3	.7604-02
38	90.000	.28800-01	54.000	.6135	.7388	.8229	49.69	30.48	.4106	559.7	.7310-02
38	90.000	.32800-01	55.000	.3278	.3945	.4393	49.85	16.34	.4087	557.2	.3904-02
38	90.000	.36700-01	56.000	.4660	.5609	.6245	49.83	23.22	.4089	557.4	.5550-02
40	90.000	.40600-01	57.000	.4707	.5713	.6397	46.41	21.35	.4321	571.8	.5536-02
40	90.000	.48500-01	58.000	.4053	.4915	.5499	46.61	18.89	.4298	568.7	.4763-02
40	90.000	.56400-01	59.000	.3682	.4464	.4994	46.65	17.17	.4293	568.1	.4326-02
40	90.000	.76100-01	60.000	.2763	.3351	.3750	46.61	12.88	.4298	568.7	.3247-02
40	90.000	.95800-01	61.000	.2083	.2525	.2826	46.61	9.706	.4298	568.7	.2447-02
40	90.000	.11550	62.000	.1510	.1833	.2052	46.45	7.014	.4317	571.3	.1776-02
38	135.00	.19000-01	49.000	.7571	.9115	1.015	49.78	37.69	.4095	558.3	.9018-02
38	135.00	.22900-01	51.000	.7163	.8618	.9593	49.92	35.76	.4079	556.0	.8528-02
38	180.00	.91000-02	23.000	.2842	.3437	.3840	48.59	13.81	.4232	576.9	.3398-02
38	180.00	.11100-01	24.000	1.116	1.347	1.502	49.24	54.97	.4157	566.7	.1332-01
38	180.00	.13100-01	25.000	.9758	1.176	1.310	49.54	48.34	.4123	562.0	.1163-01
38	180.00	.15000-01	26.000	.9265	1.116	1.243	49.64	46.00	.4111	560.4	.1104-01
38	180.00	.17000-01	27.000	.8629	1.039	1.157	49.79	42.96	.4094	558.1	.1028-01
38	180.00	.19000-01	28.000	.8226	.9900	1.102	49.86	41.01	.4086	557.1	.9796-02
38	180.00	.20900-01	29.000	.7805	.9391	1.045	49.94	38.98	.4077	555.8	.9292-02
38	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	180.00	.28800-01	32.000	.6182	.7436	.8275	50.00	30.91	.4070	554.9	.7358-02
38	180.00	.32800-01	33.000	.5426	.6527	.7264	49.99	27.12	.4072	555.1	.6459-02
39	180.00	.36700-01	34.000	.5324	.6450	.7213	46.60	24.81	.4272	563.2	.6243-02
39	180.00	.40600-01	35.000	.4850	.5878	.6575	46.51	22.56	.4282	564.5	.5689-02
39	180.00	.48500-01	36.000	.4398	.5334	.5969	46.37	20.39	.4299	566.8	.5162-02
39	180.00	.56400-01	37.000	.4144	.5026	.5625	46.32	19.19	.4305	567.5	.4864-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
39	180.00	.95800-01	39.000	.2663	.3235	.3625	45.97	12.24	.4346	573.0	.3130-02
39	180.00	.11550	40.000	.2102	.2555	.2864	45.86	9.641	.4360	574.7	.2472-02
39	180.00	.16480	41.000	.1136	.1380	.1547	45.86	5.209	.4360	574.7	.1336-02
39	180.00	.18150	42.000	.8653-01	.1052	.1179	45.88	3.970	.4358	574.5	.1017-02
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	225.00	.22900-01	30.000	.7617	.9165	1.020	49.94	38.04	.4077	555.8	.9069-02
38	270.00	.91000-02	63.000	1.005	1.214	1.356	48.82	49.06	.4205	573.2	.1201-01
38	270.00	.11100-01	64.000	1.089	1.315	1.467	48.97	53.31	.4189	571.0	.1300-01

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A112)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
38	270.00	.13100-01	65.000	1.029	1.242	1.386	49.19	50.64	.4163	567.6	.1229-01
38	270.00	.17000-01	67.000	.9636	1.162	1.295	49.45	47.65	.4133	563.4	.1149-01
38	270.00	.20900-01	69.000	.8624	1.039	1.158	49.58	42.76	.4118	561.4	.1028-01
38	270.00	.24900-01	71.000	.8121	.9781	1.090	49.66	40.33	.4109	560.2	.9677-02
38	270.00	.28900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	270.00	.28800-01	73.000	.7103	.8620	.9650	46.45	32.99	.4317	571.2	.8352-02
40	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	270.00	.36700-01	75.000	.6858	.8319	.9310	46.55	31.92	.4305	569.7	.8061-02
40	270.00	.40600-01	76.000	.6343	.7693	.8608	46.61	29.57	.4298	568.7	.7455-02
40	270.00	.48500-01	77.000	.5658	.6862	.7678	46.61	26.37	.4298	568.8	.6650-02
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
40	270.00	.76100-01	79.000	.4263	.5166	.5779	46.74	19.92	.4282	566.7	.5007-02
40	270.00	.95900-01	80.000	.3421	.4146	.4637	46.75	15.99	.4281	566.4	.4018-02
40	270.00	.11560	81.000	.2815	.3414	.3820	46.62	13.12	.4297	568.6	.3308-02
38	315.00	.15000-01	66.000	.9414	1.137	1.269	48.97	46.09	.4189	571.0	.1124-01
38	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
38	315.00	.22900-01	70.000	.7699	.9290	1.036	49.19	37.87	.4163	567.6	.9189-02

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
28	.0000	.0000	5.300	.5037+07	405.2	1295.	316.1	.5347	199.1	.2254-03	3665.	.2750-01
29	.0000	.0000	5.300	.5027+07	404.8	1295.	316.3	.5341	199.2	.2250-03	3666.	.2750-01
30	.0000	.0000	5.300	.5007+07	404.8	1299.	317.1	.5340	199.7	.2244-03	3671.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
28	.0000	.2574
29	.0000	.2573
30	.0000	.2573

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
28	.00000	.91000-02	1.0000	.6105	.7401	.8280	46.42	28.34	.4290	565.2	.7160-02
28	.00000	.11100-01	2.0000	1.174	1.421	1.589	46.65	54.75	.4262	561.5	.1375-01
28	.00000	.13100-01	3.0000	.7649	.9251	1.033	46.94	35.91	.4227	557.0	.8954-02
28	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	.00000	.17000-01	5.0000	.8722	1.054	1.177	47.15	41.12	.4203	553.7	.1020-01
28	.00000	.19000-01	6.0000	.8689	1.049	1.171	47.28	41.08	.4187	551.6	.1016-01
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	.00000	.24900-01	9.0000	.7785	.9395	1.048	47.47	36.96	.4165	548.7	.9096-02
28	.00000	.26900-01	10.000	.7236	.8731	.9737	47.51	34.38	.4160	548.1	.8453-02
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	.00000	.32800-01	12.000	.6302	.7612	.8495	47.39	29.87	.4190	553.8	.7387-02
30	.00000	.36700-01	13.000	.5438	.6567	.7327	47.47	25.81	.4181	552.6	.6373-02
30	.00000	.40600-01	14.000	.5619	.6787	.7574	47.41	26.64	.4187	553.4	.6586-02
30	.00000	.48500-01	15.000	.4853	.5859	.6538	47.48	23.04	.4179	552.3	.5687-02
30	.00000	.56400-01	16.000	.4657	.5624	.6275	47.43	22.09	.4185	553.1	.5458-02
30	.00000	.76100-01	17.000	.3625	.4379	.4897	47.39	17.18	.4189	553.7	.4249-02
30	.00000	.95800-01	18.000	.2872	.3470	.3873	47.32	13.59	.4198	554.9	.3367-02
30	.00000	.11550	19.000	.2254	.2726	.3045	47.11	10.62	.4222	558.1	.2645-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HW/HREF (R3A114)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	CDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
30	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	.00000	.21400	22.000	.6195-01	.7479-01	.8343-01	47.54	2.945	.4172	551.4	.7258-03
29	2.0000	.24700-01	165.00	.7535	.9107	1.017	47.11	35.49	.4208	554.7	.8823-02
29	9.0000	.15000-01	157.00	.8502	1.029	1.149	46.89	39.86	.4234	558.2	.9963-02
29	9.0000	.17600-01	158.00	.9112	1.102	1.231	46.98	42.80	.4224	556.8	.1067-01
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	9.8000	.24700-01	164.00	.8175	.9888	1.104	46.96	38.39	.4226	557.0	.9578-02
28	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	10.000	.30800-01	92.000	.6623	.7994	.8918	47.42	31.41	.4170	549.4	.7740-02
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	14.600	.44200-01	169.00	.5175	.6253	.6979	47.19	24.42	.4198	553.4	.6058-02
28	18.500	.44200-01	106.00	.5058	.6106	.6812	47.39	23.97	.4174	550.0	.5912-02
29	19.600	.62900-01	175.00	.4132	.4994	.5576	47.10	19.46	.4209	554.9	.4838-02
28	19.800	.40800-01	101.00	.5447	.6577	.7339	47.33	25.78	.4182	550.9	.6367-02
28	20.000	.24900-01	89.000	.7692	.9295	1.038	47.16	36.27	.4202	553.6	.8997-02
28	20.000	.28800-01	91.000	.6960	.8409	.9385	47.23	32.87	.4193	552.5	.8140-02
28	20.000	.32800-01	93.000	.6337	.7654	.8541	47.28	29.97	.4187	551.6	.7409-02
29	21.800	.82200-01	182.00	.3298	.3986	.4450	47.14	15.55	.4204	554.2	.3862-02
28	22.200	.62900-01	125.00	.4130	.4984	.5559	47.48	19.61	.4164	548.6	.4825-02
28	22.400	.44200-01	107.00	.5121	.6183	.6898	47.37	24.26	.4176	550.2	.5986-02
29	22.600	.10270	192.00	.2569	.3105	.3466	47.16	12.12	.4202	553.9	.3008-02
28	23.000	.42000-01	105.00	.5260	.6352	.7088	47.32	24.89	.4183	551.1	.6149-02
28	23.400	.59600-01	120.00	.4246	.5124	.5715	47.45	20.15	.4167	549.0	.4961-02
30	23.900	.21310	250.00	.6073-01	.7338-01	.8191-01	47.32	2.874	.4198	554.8	.7121-03
28	24.100	.82200-01	139.00	.3304	.3988	.4449	47.43	15.67	.4169	549.3	.3861-02
29	24.400	.12440	207.00	.2032	.2457	.2745	46.96	9.541	.4226	557.1	.2380-02
30	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	24.800	.16810	223.00	.1158	.1402	.1566	46.97	5.442	.4239	560.3	.1360-02
28	24.900	.62900-01	126.00	.4123	.4976	.5550	47.46	19.57	.4166	548.9	.4818-02
29	25.000	.79500-01	178.00	.3405	.4115	.4595	47.12	16.04	.4207	554.5	.3987-02
29	25.300	.10000+00	186.00	.2677	.3236	.3613	47.09	12.61	.4210	554.9	.3135-02
29	25.300	.10270	191.00	.2597	.3138	.3504	47.12	12.23	.4207	554.6	.3041-02
28	25.500	.60700-01	124.00	.4199	.5068	.5653	47.45	19.92	.4167	549.1	.4907-02
29	26.000	.12440	206.00	.2019	.2442	.2728	46.95	9.482	.4226	557.2	.2366-02
28	26.300	.82200-01	140.00	.3081	.3719	.4148	47.45	14.62	.4167	549.1	.3600-02
29	26.700	.12100	199.00	.2018	.2441	.2727	46.97	9.481	.4224	556.9	.2365-02
30	26.800	.16810	222.00	.1081	.1308	.1461	47.00	5.081	.4236	559.9	.1269-02
30	27.000	.19040	237.00	.8184-01	.9893-01	.1105	47.21	3.863	.4212	556.6	.9600-03

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A114)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
30	27.100	.21310	249.00	.5032-01	.6080-01	.6786-01	47.33	2.381	.4197	554.7	.5900-03
29	27.200	.80300-01	180.00	.3407	.4118	.4598	47.10	16.05	.4209	554.9	.3989-02
29	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	27.400	.40100-01	98.000	.5505	.6648	.7418	47.31	26.05	.4183	551.2	.6436-02
29	27.400	.16480	215.00	.1084	.1311	.1464	47.00	5.095	.4221	556.5	.1270-02
28	27.600	.41600-01	102.00	.5387	.6506	.7260	47.30	25.48	.4185	551.4	.6298-02
29	27.600	.12440	205.00	.2009	.2431	.2715	46.92	9.429	.4230	557.6	.2355-02
30	27.600	.18700	230.00	.7887-01	.9535-01	.1065	47.17	3.720	.4216	557.2	.9252-03
30	27.700	.21010	243.00	.6534-01	.7897-01	.8817-01	47.24	3.087	.4207	556.0	.7663-03
29	27.900	.10110	188.00	.2579	.3119	.3483	47.03	12.13	.4217	555.9	.3021-02
28	28.000	.46800-01	110.00	.4923	.5945	.6633	47.32	23.29	.4183	551.1	.5755-02
30	28.200	.16810	221.00	.1102	.1333	.1489	47.01	5.179	.4235	559.7	.1293-02
29	28.300	.12200	201.00	.2062	.2493	.2784	47.00	9.638	.4221	556.5	.2415-02
30	28.300	.19040	236.00	.7037-01	.8507-01	.9499-01	47.19	3.321	.4213	556.8	.8255-03
28	28.400	.53500-01	114.00	.4636	.5598	.6245	47.37	21.96	.4176	550.2	.5419-02
30	28.400	.21310	248.00	.5672-01	.6853-01	.7650-01	47.32	2.684	.4198	554.9	.6650-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	28.800	.60400-01	121.00	.4131	.4986	.5562	47.44	19.60	.4168	549.1	.4827-02
29	28.800	.16590	217.00	.1025	.1239	.1384	47.01	4.817	.4220	556.3	.1200-02
30	28.900	.18800	232.00	.7533-01	.9107-01	.1017	47.17	3.553	.4216	557.2	.8836-03
28	29.000	.65700-01	129.00	.4021	.4853	.5413	47.44	19.07	.4168	549.2	.4698-02
30	29.000	.21110	244.00	.5534-01	.6688-01	.7467-01	47.26	2.615	.4205	555.8	.6490-03
28	29.200	.72400-01	133.00	.3571	.4311	.4809	47.39	16.92	.4174	549.9	.4173-02
28	29.300	.79500-01	136.00	.3156	.3809	.4249	47.43	14.97	.4169	549.3	.3688-02
28	29.600	.92500-01	143.00	.2871	.3465	.3866	47.39	13.60	.4174	550.0	.3355-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	29.900	.12100	198.00	.2012	.2432	.2717	47.01	9.456	.4220	556.3	.2356-02
29	30.200	.16480	214.00	.9158-01	.1107	.1237	47.00	4.304	.4221	556.5	.1073-02
30	30.200	.18700	229.00	.7094-01	.8576-01	.9577-01	47.18	3.347	.4215	557.1	.8321-03
30	30.300	.21010	242.00	.6048-01	.7310-01	.8160-01	47.26	2.859	.4205	555.7	.7093-03
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	31.500	.11100-01	83.000	1.276	1.546	1.729	46.48	59.30	.4282	564.2	.1496-01
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	32.100	.21010	241.00	.5845-01	.7066-01	.7890-01	47.20	2.759	.4212	556.7	.6856-03
29	32.200	.16480	213.00	.9582-01	.1159	.1295	46.96	4.500	.4226	557.0	.1123-02
30	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	32.200	.18700	228.00	.7951-01	.9614-01	.1074	47.15	3.749	.4218	557.5	.9328-03
29	32.300	.12100	197.00	.2026	.2450	.2737	46.95	9.509	.4227	557.3	.2373-02
29	32.300	.12300	194.00	.1840	.2226	.2487	46.90	8.630	.4233	558.0	.2156-02
29	32.300	.12730	208.00	.1842	.2228	.2488	46.94	8.644	.4229	557.4	.2158-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A114)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
29	32.300	.13420	209.00	.1733	.2096	.2341	46.98	8.143	.4223	556.8	.2031-02
29	32.400	.10000+00	147.00	.2633	.3184	.3556	47.02	12.38	.4218	556.1	.3085-02
29	32.400	.10110	184.00	.2580	.3119	.3484	47.01	12.13	.4220	556.3	.3022-02
29	32.400	.10630	193.00	.2454	.2967	.3313	47.06	11.55	.4214	555.5	.2874-02
29	32.500	.85800-01	183.00	.3125	.3778	.4219	47.04	14.70	.4216	555.8	.3660-02
28	32.500	.92500-01	144.00	.2811	.3394	.3787	47.34	13.31	.4180	550.7	.3286-02
28	32.600	.79500-01	137.00	.3245	.3918	.4371	47.36	15.37	.4178	550.4	.3793-02
29	32.600	.80800-01	176.00	.3303	.3993	.4460	47.03	15.53	.4217	555.9	.3869-02
28	32.700	.67400-01	132.00	.3843	.4640	.5177	47.35	18.19	.4179	550.6	.4492-02
28	32.700	.72400-01	134.00	.3675	.4437	.4950	47.37	17.41	.4176	550.2	.4296-02
28	32.800	.65700-01	130.00	.3994	.4821	.5379	47.38	18.92	.4175	550.1	.4668-02
29	32.800	.16680	210.00	.9306-01	.1125	.1256	47.04	4.378	.4216	555.7	.1090-02
30	32.800	.18880	225.00	.6605-01	.7985-01	.8917-01	47.18	3.116	.4215	557.1	.7748-03
30	32.800	.21170	239.00	.5976-01	.7228-01	.8074-01	47.06	2.812	.4229	558.9	.7013-03
28	32.900	.58600-01	118.00	.4449	.5371	.5993	47.35	21.06	.4179	550.6	.5200-02
28	32.900	.60400-01	122.00	.3804	.4713	.5258	47.39	18.50	.4174	549.9	.4563-02
29	32.900	.61300-01	171.00	.3830	.4630	.5169	47.12	18.05	.4207	554.6	.4485-02
28	33.000	.53500-01	115.00	.4663	.5630	.6281	47.37	22.09	.4177	550.3	.5450-02
28	33.200	.46800-01	111.00	.4801	.5798	.6470	47.30	22.71	.4185	551.4	.5613-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	33.400	.42800-01	166.00	.5213	.6303	.7040	47.01	24.51	.4220	556.3	.6106-02
28	33.500	.40100-01	99.000	.5243	.6343	.7135	47.26	25.01	.4190	552.0	.6189-02
0	33.500	.41600-01	104.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	33.600	.38300-01	97.000	.5582	.6744	.7528	47.21	26.35	.4196	552.8	.6528-02
28	33.700	.36700-01	96.000	.5860	.7080	.7903	47.19	27.65	.4198	553.1	.6853-02
28	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	34.700	.18700	227.00	.6712-01	.8118-01	.9067-01	47.10	3.161	.4225	558.4	.7876-03
30	34.700	.21010	240.00	.6696-01	.8097-01	.9043-01	47.13	3.156	.4221	557.9	.7857-03
29	34.900	.16480	212.00	.1046	.1265	.1414	46.95	4.913	.4226	557.2	.1226-02
29	35.100	.10000+00	148.00	.2677	.3237	.3615	47.02	12.59	.4218	556.1	.3136-02
0	35.200	.23400-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	35.300	.22100-01	160.00	.8409	1.018	1.137	46.82	39.38	.4242	559.2	.9857-02
28	35.300	.92500-01	145.00	.2807	.3389	.3781	47.37	13.30	.4176	550.2	.3281-02
30	35.400	.18800	231.00	.8217-01	.9936-01	.1110	47.16	3.875	.4218	557.4	.9640-03
29	35.500	.12100	196.00	.2020	.2444	.2730	46.92	9.479	.4230	557.6	.2367-02
29	35.600	.16580	216.00	.1098	.1328	.1483	46.96	5.155	.4226	557.1	.1286-02
28	35.800	.80600-01	138.00	.3076	.3714	.4144	47.34	14.56	.4180	550.7	.3595-02
30	35.900	.21310	247.00	.6223-01	.7522-01	.8399-01	47.22	2.938	.4210	556.5	.7299-03
30	36.000	.19040	235.00	.8508-01	.1029	.1149	47.16	4.012	.4218	557.4	.9981-03
28	36.200	.72400-01	135.00	.2862	.3454	.3853	47.42	13.57	.4171	549.5	.3344-02
29	36.200	.16810	220.00	.1138	.1377	.1538	46.98	5.349	.4223	556.7	.1334-02
29	36.300	.12200	200.00	.2012	.2434	.2720	46.90	9.437	.4233	558.0	.2358-02
28	36.600	.65700-01	131.00	.3963	.4786	.5340	47.33	18.76	.4182	550.9	.4633-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A114)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
30	36.700	.18700	226.00	.8629-01	.1043	.1165	47.11	4.065	.4223	558.2	.1012-02
29	36.900	.10110	187.00	.2680	.3240	.3618	47.06	12.61	.4213	555.4	.3138-02
29	36.900	.16480	211.00	.1137	.1375	.1536	46.97	5.341	.4224	556.8	.1332-02
28	37.000	.60400-01	123.00	.4188	.5056	.5641	47.38	19.85	.4175	550.1	.4895-02
29	37.000	.12440	204.00	.1989	.2407	.2689	46.88	9.325	.4236	558.4	.2331-02
28	37.100	.58600-01	119.00	.4402	.5317	.5933	47.29	20.82	.4186	551.5	.5147-02
30	37.200	.21310	246.00	.6316-01	.7636-01	.8526-01	47.19	2.981	.4213	556.8	.7409-03
30	37.300	.19040	234.00	.8519-01	.1030	.1151	47.10	4.013	.4224	558.2	.9996-03
28	37.600	.53500-01	116.00	.4569	.5517	.6156	47.32	21.62	.4183	551.1	.5341-02
29	37.600	.16810	219.00	.1145	.1385	.1547	46.94	5.373	.4228	557.3	.1341-02
29	37.800	.10270	150.00	.2660	.3218	.3594	46.95	12.49	.4226	557.1	.3117-02
29	37.900	.12100	195.00	.2088	.2526	.2822	46.88	9.787	.4235	558.3	.2447-02
29	38.000	.80300-01	179.00	.3432	.4149	.4633	47.06	16.15	.4214	555.5	.4020-02
28	38.500	.46800-01	112.00	.4835	.5839	.6516	47.28	22.86	.4187	551.7	.5653-02
29	38.600	.12440	203.00	.2002	.2423	.2707	46.82	9.373	.4242	559.2	.2347-02
29	38.700	.10000+00	185.00	.2594	.3136	.3502	47.02	12.20	.4218	556.0	.3038-02
28	38.900	.82200-01	141.00	.3131	.3780	.4218	47.35	14.82	.4179	550.6	.3659-02
28	39.300	.41600-01	104.00	.5247	.6339	.7075	47.21	24.77	.4195	552.8	.6136-02
29	39.500	.10270	190.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	39.600	.16810	218.00	.1147	.1387	.1549	46.95	5.384	.4227	557.2	.1344-02
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	39.900	.19040	233.00	.8130-01	.9831-01	.1098	47.13	3.832	.4220	557.8	.9538-03
29	40.100	.79500-01	177.00	.3456	.4178	.4666	47.04	16.26	.4215	555.7	.4047-02
29	40.200	.12440	202.00	.2010	.2433	.2718	46.82	9.411	.4242	559.2	.2356-02
30	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	41.100	.60700-01	173.00	.4184	.5059	.5649	47.05	19.68	.4215	555.7	.4901-02
28	41.100	.82200-01	142.00	.3240	.3912	.4365	47.32	15.33	.4182	551.0	.3787-02
29	42.300	.10270	199.00	.2604	.3221	.3598	47.03	12.53	.4217	556.9	.3121-02
29	42.600	.59600-01	172.00	.4392	.5311	.5931	47.02	20.65	.4218	556.0	.5145-02
29	43.200	.42000-01	168.00	.4913	.5947	.6638	46.96	23.07	.4226	557.1	.5756-02
29	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	43.600	.62900-01	128.00	.3806	.4596	.5128	47.32	18.01	.4182	551.0	.4449-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	45.000	.22900-01	8.0000	.9846	1.191	1.331	46.91	46.19	.4231	557.4	.1153-01
29	46.100	.62900-01	174.00	.4148	.5015	.5600	47.04	19.51	.4216	555.8	.4858-02
29	47.700	.40800-01	167.00	.5541	.6702	.7487	46.94	26.01	.4228	557.4	.6492-02
28	48.400	.44200-01	109.00	.4908	.5906	.6575	48.14	23.62	.4085	538.2	.5721-02
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A114)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
29	65.200	.24700-01	162.00	.8261	1.001	1.119	46.57	38.47	.4272	563.2	.9692-02
30	90.000	.91000-02	44.000	.8256	1.002	1.123	46.22	38.16	.4329	572.2	.9720-02
30	90.000	.11100-01	45.000	1.418	1.721	1.927	46.29	65.64	.4320	571.0	.1669-01
30	90.000	.13100-01	46.000	1.197	1.452	1.625	46.42	55.55	.4305	569.0	.1408-01
30	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	90.000	.17000-01	48.000	.9359	1.135	1.270	46.49	43.51	.4296	567.8	.1101-01
30	90.000	.20900-01	50.000	.8674	1.051	1.176	46.58	40.41	.4286	566.4	.1020-01
30	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	90.000	.26900-01	53.000	.7308	.8852	.9898	46.73	34.15	.4268	564.1	.8587-02
30	90.000	.28800-01	54.000	.7031	.8514	.9519	46.79	32.90	.4261	563.2	.8259-02
30	90.000	.32800-01	55.000	.3761	.4551	.5085	46.97	17.67	.4239	560.3	.4416-02
30	90.000	.36700-01	56.000	.5432	.6574	.7346	46.95	25.50	.4242	560.7	.6378-02
28	90.000	.40600-01	57.000	.5372	.6499	.7262	46.87	25.18	.4236	558.1	.6290-02
28	90.000	.48500-01	58.000	.4754	.5749	.6420	47.02	22.36	.4218	555.7	.5564-02
28	90.000	.56400-01	59.000	.4466	.5399	.6028	47.07	21.02	.4213	555.0	.5225-02
28	90.000	.76100-01	60.000	.3671	.4436	.4955	47.08	16.94	.4211	554.8	.4061-02
28	90.000	.95800-01	61.000	.2714	.3280	.3663	47.09	12.78	.4209	554.6	.3175-02
28	90.000	.11550	62.000	.2124	.2569	.2869	46.99	9.980	.4222	556.3	.2486-02
30	135.00	.19000-01	49.000	.8877	1.076	1.203	46.66	41.42	.4277	565.3	.1043-01
30	135.00	.22900-01	51.000	.8164	.9887	1.105	46.77	38.19	.4263	563.4	.9591-02
30	180.00	.91000-02	23.000	.2596	.3152	.3531	46.16	11.98	.4335	573.0	.3057-02
30	180.00	.11100-01	24.000	1.375	1.667	1.865	46.57	64.03	.4287	566.7	.1617-01
30	180.00	.13100-01	25.000	1.160	1.404	1.570	46.79	54.27	.4261	563.1	.1362-01
30	180.00	.15000-01	26.000	1.088	1.317	1.472	46.87	50.98	.4252	562.0	.1278-01
30	180.00	.17000-01	27.000	.9453	1.144	1.278	46.97	44.40	.4239	560.3	.1110-01
30	180.00	.19000-01	28.000	.8973	1.086	1.213	47.02	42.19	.4233	559.5	.1053-01
30	180.00	.20900-01	29.000	.8492	1.027	1.147	47.10	40.00	.4224	558.3	.9964-02
30	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	180.00	.28800-01	32.000	.6937	.8382	.9356	47.32	32.83	.4198	554.9	.8134-02
30	180.00	.32800-01	33.000	.6061	.7322	.8171	47.38	28.72	.4190	553.9	.7105-02
29	180.00	.36700-01	34.000	.5926	.7157	.7988	47.26	28.00	.4190	552.3	.6935-02
29	180.00	.40600-01	35.000	.5335	.6444	.7191	47.27	25.22	.4189	552.2	.6244-02
29	180.00	.48500-01	36.000	.4817	.5819	.6496	47.21	22.74	.4196	553.1	.5638-02
29	180.00	.56400-01	37.000	.4561	.5508	.6146	47.30	21.58	.4184	551.6	.5337-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
29	180.00	.95800-01	39.000	.2935	.3546	.3957	47.22	13.86	.4194	552.9	.3435-02
29	180.00	.11550	40.000	.2294	.2773	.3097	47.08	10.80	.4211	555.1	.2687-02
29	180.00	.16480	41.000	.1247	.1508	.1684	47.06	5.868	.4214	555.5	.1461-02
29	180.00	.18450	42.000	.9324-01	.1126	.1257	47.24	4.404	.4192	552.7	.1091-02
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	225.00	.22900-01	30.000	.8024	.9688	1.081	47.49	38.10	.4178	552.2	.9402-02
30	270.00	.91000-02	63.000	.7370	.8929	.9985	46.68	34.41	.4273	564.8	.8661-02
30	270.00	.11100-01	64.000	1.370	1.658	1.853	46.90	64.25	.4248	561.5	.1609-01

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A114)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
30	270.00	.13100-01	65.000	1.213	1.466	1.638	47.16	57.19	.4218	557.4	.1423-01
30	270.00	.17000-01	67.000	.9521	1.150	1.283	47.41	45.14	.4187	553.4	.1116-01
30	270.00	.20900-01	69.000	.8617	1.040	1.160	47.54	40.96	.4172	551.4	.1010-01
30	270.00	.24900-01	71.000	.7959	.9607	1.072	47.54	37.84	.4172	551.4	.9324-02
30	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	270.00	.28800-01	73.000	.6484	.7818	.8714	47.68	30.91	.4140	545.4	.7570-02
28	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	270.00	.36700-01	75.000	.5779	.6971	.7771	47.61	27.51	.4148	546.6	.6749-02
28	270.00	.40600-01	76.000	.5313	.6409	.7146	47.58	25.28	.4151	547.0	.6205-02
28	270.00	.48500-01	77.000	.4799	.5792	.6460	47.46	22.78	.4165	548.8	.5608-02
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	270.00	.76100-01	79.000	.3618	.4371	.4879	47.20	17.08	.4196	552.9	.4231-02
28	270.00	.95800-01	80.000	.2813	.3400	.3796	47.14	13.26	.4204	553.9	.3291-02
28	270.00	.11550	81.000	.2239	.2706	.3022	47.04	10.53	.4215	555.4	.2620-02
30	315.00	.15000-01	66.000	1.003	1.212	1.353	47.26	47.38	.4205	555.8	.1176-01
30	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
30	315.00	.22900-01	70.000	.8335	1.006	1.122	47.54	39.62	.4172	551.4	.9764-02

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = 6.000 RN/FT = 5.000

•••TEST CONDITIONS•••

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
41	.0000	6.000	5.300	.4781+07	402.9	1333.	325.9	.5305	205.2	.2169-03	3722.	.2750-01
42	.0000	6.000	5.300	.4848+07	406.1	1328.	324.7	.5349	204.5	.2195-03	3715.	.2750-01
43	.0000	6.000	5.300	.4986+07	404.8	1302.	318.0	.5339	200.3	.2237-03	3676.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
41	.0000	.2572
42	.0000	.2582
43	.0000	.2574

•••TEST DATA•••

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
41	.00000	.91000-02	1.0000	.7727	.9401	1.054	46.95	36.28	.4386	595.8	.9289-02
41	.00000	.11100-01	2.0000	1.018	1.238	1.388	47.08	47.93	.4371	593.7	.1223-01
41	.00000	.13100-01	3.0000	.7243	.8785	.9832	47.65	34.51	.4305	584.7	.8685-02
41	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	.00000	.17000-01	5.0000	.8378	1.018	1.140	47.29	39.62	.4346	590.4	.1006-01
41	.00000	.19000-01	6.0000	.8347	1.014	1.136	47.30	39.48	.4346	590.3	.1002-01
41	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.24900-01	9.0000	.7054	.8562	.9586	47.51	33.52	.4321	586.9	.8463-02
41	.00000	.26900-01	10.000	.6603	.8012	.8969	47.58	31.42	.4313	585.8	.7920-02
41	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.32800-01	12.000	.5754	.6968	.7791	46.91	26.99	.4264	565.2	.6772-02
43	.00000	.36700-01	13.000	.4861	.5883	.6575	47.06	22.88	.4245	562.7	.5718-02
43	.00000	.40600-01	14.000	.5406	.6544	.7313	47.05	25.43	.4247	563.0	.6359-02
43	.00000	.48500-01	15.000	.4725	.5718	.6389	47.08	22.24	.4243	562.4	.5557-02
43	.00000	.56400-01	16.000	.4539	.5493	.6138	47.09	21.37	.4242	562.3	.5338-02
43	.00000	.76100-01	17.000	.3452	.4176	.4666	47.13	16.27	.4237	561.6	.4059-02
43	.00000	.95800-01	18.000	.2783	.3368	.3763	47.12	13.11	.4239	561.8	.3273-02
43	.00000	.11550	19.000	.2234	.2706	.3025	46.88	10.47	.4266	565.5	.2629-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A116)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
43	.00000	.16480	20.000	.1242	.1505	.1682	46.88	5.824	.4267	565.6	.1462-02
43	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	.00000	.21400	22.000	.6362-01	.7697-01	.8600-01	47.14	2.999	.4237	561.5	.7481-03
42	2.0000	.24700-01	165.00	.6774	.8202	.9168	48.07	32.56	.4256	575.9	.8059-02
42	9.0000	.15000-01	157.00	.7736	.9366	1.047	48.09	37.20	.4254	575.6	.9203-02
42	9.0000	.17600-01	158.00	.8744	1.059	1.183	48.10	42.06	.4253	575.5	.1040-01
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	9.8000	.24700-01	164.00	.7439	.9006	1.007	48.12	35.80	.4251	575.2	.8849-02
41	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	10.000	.30800-01	92.000	.5988	.7267	.8136	47.53	28.46	.4319	586.6	.7184-02
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	14.600	.44200-01	169.00	.5148	.6220	.6942	48.59	25.01	.4197	567.9	.6113-02
41	18.500	.44200-01	106.00	.5031	.6099	.6823	47.79	24.04	.4289	582.5	.6030-02
42	19.600	.62900-01	175.00	.4199	.5073	.5662	48.60	20.41	.4195	567.6	.4986-02
41	19.800	.40800-01	101.00	.5401	.6551	.7332	47.67	25.75	.4303	584.5	.6477-02
41	20.000	.24900-01	89.000	.7131	.8663	.9706	47.28	33.72	.4347	590.5	.8562-02
41	20.000	.28800-01	91.000	.6350	.7709	.8633	47.45	30.13	.4328	587.9	.7620-02
41	20.000	.32800-01	93.000	.5932	.7200	.8061	47.51	28.18	.4321	587.0	.7117-02
42	21.800	.82200-01	182.00	.3403	.4107	.4582	48.82	16.61	.4170	564.3	.4038-02
41	22.200	.62900-01	125.00	.4133	.5005	.5594	48.07	19.87	.4256	578.2	.4949-02
41	22.400	.44200-01	107.00	.5165	.6260	.7003	47.81	24.69	.4286	582.2	.6189-02
42	22.600	.10270	192.00	.2726	.3290	.3669	48.90	13.33	.4161	563.0	.3234-02
41	23.000	.42000-01	105.00	.5309	.6437	.7203	47.72	25.34	.4296	583.6	.6364-02
41	23.400	.59600-01	120.00	.4248	.5144	.5751	48.02	20.40	.4262	578.9	.5087-02
43	23.900	.21310	250.00	.7279-01	.8806-01	.9837-01	47.18	3.434	.4232	560.9	.8558-03
41	24.100	.82200-01	139.00	.3354	.4059	.4536	48.18	16.16	.4244	576.4	.4014-02
42	24.400	.12440	207.00	.2210	.2667	.2974	48.90	10.81	.4160	562.9	.2622-02
43	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	24.800	.16810	223.00	.1388	.1681	.1879	46.94	6.515	.4260	564.7	.1633-02
41	24.900	.62900-01	126.00	.4165	.5043	.5637	48.09	20.03	.4254	577.9	.4987-02
42	25.000	.79500-01	178.00	.3570	.4309	.4808	48.77	17.41	.4176	565.0	.4236-02
42	25.300	.10000+00	186.00	.2851	.3440	.3836	48.90	13.94	.4161	563.0	.3381-02
42	25.300	.10270	191.00	.2785	.3361	.3748	48.90	13.62	.4160	563.0	.3304-02
41	25.500	.60700-01	124.00	.4277	.5179	.5790	48.03	20.54	.4261	578.7	.5122-02
42	26.000	.12440	206.00	.2427	.2688	.2997	48.92	10.90	.4159	562.7	.2642-02
41	26.300	.82200-01	140.00	.3164	.3828	.4277	48.23	15.26	.4237	575.6	.3786-02
42	26.700	.12100	199.00	.2289	.2761	.3079	48.97	11.21	.4152	561.8	.2715-02
43	26.800	.16810	222.00	.1321	.1599	.1787	46.97	6.203	.4256	564.1	.1554-02
43	27.000	.19040	237.00	.1010	.1223	.1366	47.14	4.763	.4237	561.5	.1188-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A116)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
43	27.100	.21310	249.00	.6571-01	.7948-01	.8878-01	47.21	3.102	.4227	560.3	.7725-03
42	27.200	.80300-01	180.00	.3587	.4331	.4831	48.77	17.49	.4175	565.0	.4257-02
42	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	27.400	.40100-01	98.000	.4835	.5861	.6556	47.82	23.12	.4286	582.1	.5794-02
42	27.400	.16480	215.00	.1314	.1584	.1765	49.07	6.446	.4140	560.2	.1557-02
41	27.600	.41600-01	102.00	.5510	.6674	.7463	47.96	26.43	.4269	579.8	.6599-02
42	27.600	.12440	205.00	.2237	.2699	.3009	48.96	10.95	.4154	562.0	.2653-02
43	27.600	.18700	230.00	.9646-01	.1167	.1304	47.13	4.546	.4238	561.7	.1134-02
43	27.700	.21010	243.00	.8114-01	.9817-01	.1097	47.14	3.825	.4236	561.4	.9541-03
42	27.900	.10110	188.00	.2814	.3396	.3787	48.90	13.76	.4161	563.0	.3339-02
41	28.000	.46800-01	110.00	.5015	.6078	.6799	47.85	24.00	.4281	581.5	.6010-02
43	28.200	.16810	221.00	.1385	.1676	.1874	47.01	6.510	.4251	563.5	.1629-02
42	28.300	.12200	201.00	.2270	.2738	.3053	48.94	11.11	.4156	562.3	.2692-02
43	28.300	.19040	236.00	.9087-01	.1099	.1228	47.18	4.287	.4232	560.9	.1068-02
41	28.400	.53500-01	114.00	.4712	.5708	.6365	47.94	22.59	.4271	580.2	.5644-02
43	28.400	.21310	248.00	.7025-01	.8497-01	.9491-01	47.21	3.317	.4227	560.3	.8258-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	28.800	.60400-01	121.00	.4219	.5108	.5709	48.10	20.29	.4253	577.6	.5051-02
42	28.800	.16580	217.00	.1259	.1518	.1692	49.06	6.175	.4142	560.4	.1492-02
43	28.900	.18800	232.00	.9279-01	.1123	.1254	47.14	4.374	.4236	561.5	.1091-02
41	29.000	.65700-01	129.00	.4141	.5012	.5601	48.16	19.94	.4246	576.7	.4956-02
43	29.000	.21110	244.00	.7050-01	.8528-01	.9527-01	47.19	3.327	.4230	560.6	.8289-03
41	29.200	.72400-01	133.00	.3726	.4510	.5041	48.15	17.94	.4247	576.9	.4460-02
41	29.300	.79500-01	136.00	.3332	.4032	.4504	48.26	16.08	.4235	575.2	.3987-02
41	29.600	.92500-01	143.00	.3033	.3669	.4099	48.29	14.65	.4231	574.7	.3629-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	29.900	.12100	198.00	.2303	.2778	.3097	49.02	11.29	.4147	561.1	.2731-02
42	30.200	.16480	214.00	.1139	.1374	.1531	49.12	5.597	.4135	559.5	.1351-02
43	30.200	.18700	229.00	.8781-01	.1062	.1187	47.18	4.143	.4232	560.9	.1032-02
43	30.300	.21010	242.00	.7591-01	.9182-01	.1026	47.20	3.582	.4230	560.6	.8924-03
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	31.500	.11100-01	83.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	32.100	.21010	241.00	.7947-01	.9613-01	.1074	47.18	3.749	.4232	560.9	.9343-03
42	32.200	.16480	213.00	.1184	.1427	.1590	49.12	5.814	.4135	559.5	.1403-02
43	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	32.200	.18700	228.00	.1027	.1243	.1388	47.14	4.841	.4236	561.5	.1208-02
42	32.300	.12100	197.00	.2347	.2832	.3157	48.97	11.50	.4152	561.8	.2784-02
42	32.300	.12300	194.00	.2174	.2623	.2924	48.95	10.64	.4155	562.2	.2578-02
42	32.300	.12730	208.00	.2163	.2608	.2908	49.05	10.61	.4143	560.6	.2565-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A116)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
42	32.300	.13420	209.00	.2026	.2441	.2719	49.27	9.982	.4118	557.2	.2400-02
42	32.400	.10000+00	147.00	.2962	.3574	.3986	48.90	14.48	.4161	563.0	.3514-02
42	32.400	.10110	184.00	.2897	.3496	.3899	48.88	14.16	.4162	563.2	.3437-02
42	32.400	.10630	193.00	.2797	.3375	.3763	48.93	13.69	.4156	562.4	.3318-02
42	32.500	.85800-01	193.00	.3396	.4099	.4572	48.83	16.58	.4168	564.0	.4029-02
41	32.500	.92500-01	144.00	.3011	.3643	.4069	48.30	14.55	.4229	574.5	.3603-02
41	32.600	.79500-01	137.00	.3427	.4147	.4633	48.23	16.53	.4238	575.6	.4101-02
42	32.600	.80800-01	176.00	.3599	.4346	.4848	48.76	17.55	.4176	565.1	.4272-02
41	32.700	.67400-01	132.00	.3990	.4831	.5400	48.10	19.19	.4253	577.7	.4777-02
41	32.700	.72400-01	134.00	.3834	.4640	.5186	48.16	18.47	.4246	576.7	.4589-02
41	32.800	.65700-01	130.00	.4143	.5014	.5603	48.16	19.95	.4246	576.7	.4958-02
42	32.800	.16680	210.00	.1163	.1401	.1562	49.14	5.712	.4133	559.3	.1378-02
43	32.800	.18880	225.00	.8858-01	.1071	.1197	47.19	4.130	.4230	560.7	.1041-02
43	32.800	.21170	239.00	.7643-01	.9251-01	.1034	47.05	3.595	.4247	563.0	.8990-03
41	32.900	.58600-01	118.00	.4579	.5544	.6197	48.07	22.01	.4256	578.1	.5482-02
41	32.900	.60400-01	122.00	.4057	.4910	.5486	48.20	19.55	.4242	576.2	.4855-02
42	32.900	.61300-01	171.00	.4101	.4950	.5523	48.78	20.00	.4174	564.8	.4866-02
41	33.000	.53500-01	115.00	.4771	.5778	.6459	48.03	22.92	.4260	578.7	.5713-02
41	33.200	.46800-01	111.00	.5020	.6082	.6802	47.93	24.06	.4273	580.4	.6014-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	33.400	.42800-01	166.00	.5527	.6677	.7453	48.59	26.85	.4197	567.9	.6563-02
41	33.500	.40100-01	99.000	.5342	.6474	.7240	47.87	25.57	.4280	581.3	.6400-02
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	33.600	.38300-01	97.000	.5460	.6619	.7405	47.78	26.09	.4290	582.7	.6544-02
41	33.700	.36700-01	96.000	.5796	.7028	.7864	47.73	27.66	.4296	583.5	.6948-02
41	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	34.700	.18700	227.00	.8804-01	.1066	.1191	47.05	4.143	.4247	562.9	.1036-02
43	34.700	.21010	240.00	.8933-01	.1082	.1209	46.94	4.193	.4260	564.7	.1051-02
42	34.900	.16480	212.00	.1288	.1553	.1731	49.10	6.326	.4137	559.8	.1527-02
42	35.100	.10000+00	148.00	.2998	.3617	.4034	48.91	14.66	.4160	562.9	.3556-02
0	35.200	.23000-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	35.300	.22100-01	160.00	.7891	.9544	1.066	48.33	38.14	.4226	571.9	.9380-02
41	35.300	.92500-01	145.00	.3014	.3644	.4070	48.40	14.59	.4218	573.0	.3604-02
43	35.400	.18800	231.00	.1073	.1299	.1451	47.17	5.063	.4233	561.0	.1262-02
42	35.500	.12100	196.00	.2328	.2809	.3131	48.98	11.40	.4151	561.7	.2761-02
42	35.600	.16580	216.00	.1345	.1621	.1807	49.10	6.603	.4137	559.8	.1594-02
41	35.800	.80600-01	138.00	.3247	.3928	.4388	48.30	15.68	.4230	574.6	.3885-02
43	35.900	.21310	247.00	.8599-01	.1040	.1162	47.20	4.058	.4229	560.6	.1011-02
43	36.000	.19040	235.00	.1118	.1352	.1510	47.18	5.274	.4231	560.8	.1314-02
41	36.200	.72400-01	135.00	.3097	.3746	.4185	48.33	14.97	.4227	574.1	.3705-02
42	36.200	.16810	220.00	.1399	.1686	.1879	49.12	6.870	.4135	559.5	.1658-02
42	36.300	.12200	200.00	.2326	.2806	.3129	48.98	11.39	.4151	561.7	.2759-02
41	36.600	.65700-01	131.00	.4147	.5019	.5609	48.16	19.97	.4246	576.7	.4964-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A116)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
43	36.700	.18700	226.00	.1106	.1338	.1494	47.14	5.211	.4236	561.5	.1300-02
42	36.900	.10110	187.00	.2975	.3589	.4002	48.95	14.56	.4155	562.2	.3528-02
42	36.900	.16480	211.00	.1400	.1687	.1880	49.13	6.875	.4134	559.4	.1659-02
41	37.000	.60400-01	123.00	.4364	.5281	.5901	48.20	21.03	.4242	576.2	.5223-02
42	37.000	.12440	204.00	.2304	.2779	.3099	48.99	11.29	.4149	561.5	.2732-02
41	37.100	.58600-01	119.00	.4542	.5499	.6146	48.09	21.84	.4254	577.9	.5437-02
43	37.200	.21310	246.00	.8688-01	.1051	.1174	47.19	4.100	.4230	560.7	.1021-02
43	37.300	.19040	234.00	.1112	.1345	.1503	47.16	5.244	.4233	561.1	.1307-02
41	37.600	.53500-01	116.00	.4676	.5661	.6328	48.07	22.48	.4256	578.1	.5598-02
42	37.600	.16810	219.00	.1414	.1705	.1900	49.11	6.945	.4137	559.7	.1676-02
42	37.800	.10270	150.00	.2971	.3585	.3998	48.91	14.53	.4160	562.9	.3525-02
42	37.900	.12100	195.00	.2390	.2884	.3215	48.95	11.70	.4155	562.2	.2835-02
42	38.000	.80300-01	179.00	.3696	.4461	.4976	48.83	18.05	.4169	564.1	.4385-02
41	38.500	.46800-01	112.00	.4976	.6027	.6738	48.00	23.88	.4265	579.3	.5959-02
42	38.600	.12440	203.00	.2303	.2778	.3098	48.97	11.28	.4152	561.8	.2732-02
42	38.700	.10000+00	185.00	.2380	.3475	.3875	48.93	14.09	.4157	562.5	.3416-02
41	38.900	.82200-01	141.00	.3342	.4042	.4515	48.34	16.16	.4225	573.8	.3998-02
41	39.300	.41600-01	104.00	.5338	.6470	.7237	47.82	25.53	.4285	582.1	.5396-02
42	39.500	.10270	190.00	.2981	.3594	.4007	49.03	14.62	.4145	560.9	.3534-02
42	39.600	.16810	218.00	.1430	.1724	.1922	49.12	7.026	.4135	559.5	.1696-02
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	39.900	.19040	233.00	.1112	.1345	.1502	47.19	5.246	.4230	560.7	.1307-02
42	40.100	.79500-01	177.00	.3732	.4503	.5022	48.90	18.25	.4161	563.0	.4427-02
42	40.200	.12440	202.00	.2335	.2816	.3140	49.00	11.44	.4149	561.4	.2769-02
43	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	41.100	.60700-01	173.00	.4478	.5404	.6028	48.84	21.87	.4167	563.9	.5313-
41	41.100	.82200-01	142.00	.3472	.4198	.4689	48.36	16.79	.4222	573.5	.4152-02
42	42.300	.10270	199.00	.3027	.3651	.4070	49.03	14.84	.4145	560.9	.3589-02
42	42.600	.59600-01	172.00	.4698	.5671	.6327	48.79	22.92	.4173	564.7	.5575-02
42	43.200	.42000-01	168.00	.5096	.6155	.6868	48.68	24.80	.4186	566.5	.6050-02
42	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	43.600	.62900-01	128.00	.4032	.4878	.5449	48.30	19.48	.4229	574.5	.4824-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	45.000	.22900-01	8.0000	.8929	1.085	1.216	47.22	42.16	.4355	591.5	.1072-01
42	46.100	.62900-01	174.00	.4471	.5396	.6018	48.87	21.65	.4164	563.5	.5304-02
42	47.700	.40800-01	167.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	48.400	.44200-01	109.00	.5272	.6384	.7136	48.06	25.34	.4258	578.3	.6312-02
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A116)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
42	65.200	.24700-01	162.00	.7809	.9435	1.053	48.56	37.92	.4199	568.2	.9274-02
43	90.000	.91000-02	44.000	1.246	1.512	1.692	46.54	58.01	.4307	570.9	.1469-01
43	90.000	.11100-01	45.000	1.244	1.507	1.686	46.74	58.13	.4283	567.7	.1464-01
43	90.000	.13100-01	46.000	1.191	1.443	1.613	46.90	55.86	.4265	565.3	.1402-01
43	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	90.000	.17000-01	48.000	.9862	1.193	1.334	47.08	46.43	.4243	562.4	.1160-01
43	90.000	.20900-01	50.000	.8606	1.041	1.163	47.19	40.61	.4230	560.7	.1012-01
43	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	90.000	.26900-01	53.000	.7198	.8700	.9713	47.40	34.12	.4205	557.4	.8457-02
43	90.000	.28800-01	54.000	.7124	.8609	.9612	47.40	33.77	.4205	557.3	.8369-02
43	90.000	.32800-01	55.000	.3898	.4708	.5254	47.56	18.54	.4186	554.9	.4577-02
43	90.000	.36700-01	56.000	.5802	.7008	.7822	47.51	27.57	.4192	555.6	.6813-02
41	90.000	.40600-01	57.000	.5754	.6948	.7753	48.71	28.03	.4182	568.1	.6874-02
41	90.000	.48500-01	58.000	.5145	.6206	.6920	48.97	25.19	.4152	564.0	.6141-02
41	90.000	.56400-01	59.000	.4860	.5861	.6533	49.06	23.84	.4142	562.6	.5799-02
41	90.000	.76100-01	60.000	.3396	.4818	.5370	49.11	19.62	.4136	561.8	.4767-02
41	90.000	.95800-01	61.000	.3326	.4008	.4466	49.22	16.37	.4123	560.1	.3966-02
41	90.000	.11550	62.000	.2665	.3211	.3578	49.26	13.13	.4118	559.4	.3178-02
43	135.00	.19000-01	49.000	.8878	1.072	1.197	47.50	42.17	.4194	555.9	.1043-01
43	135.00	.22900-01	51.000	.7843	.9470	1.057	47.63	37.36	.4178	553.9	.9207-02
43	180.00	.91000-02	23.000	.4329	.5255	.5884	46.41	20.09	.4323	573.0	.5105-02
43	180.00	.11100-01	24.000	1.221	1.478	1.652	47.03	57.41	.4249	563.2	.1436-01
43	180.00	.13100-01	25.000	1.050	1.270	1.418	47.28	49.66	.4219	559.2	.1234-01
43	180.00	.15000-01	26.000	1.007	1.217	1.359	47.41	47.76	.4204	557.2	.1183-01
43	180.00	.17000-01	27.000	.9288	1.122	1.252	47.54	44.15	.4189	555.2	.1091-01
43	180.00	.19000-01	28.000	.8827	1.066	1.190	47.58	42.00	.4184	554.5	.1036-01
43	180.00	.20900-01	29.000	.8302	1.002	1.118	47.64	39.55	.4177	553.7	.9744-02
43	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	180.00	.28800-01	32.000	.6465	.7805	.8707	47.67	30.82	.4173	553.1	.7588-02
43	180.00	.32800-01	33.000	.5671	.6846	.7637	47.66	27.02	.4175	553.4	.6656-02
42	180.00	.36700-01	34.000	.5640	.6793	.7566	49.35	27.83	.4109	556.0	.6680-02
42	180.00	.40600-01	35.000	.5107	.6153	.6855	49.27	25.16	.4118	557.2	.6050-02
42	180.00	.48500-01	36.000	.4663	.5622	.6266	49.11	22.90	.4136	559.7	.5528-02
42	180.00	.56400-01	37.000	.4417	.5325	.5935	49.11	21.69	.4137	559.7	.5236-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
42	180.00	.95800-01	39.000	.2798	.3378	.3768	48.78	13.65	.4174	564.8	.3320-02
42	180.00	.11550	40.000	.2194	.2648	.2955	48.76	10.70	.4176	565.1	.2603-02
42	180.00	.16480	41.000	.1198	.1446	.1613	48.83	5.849	.4169	564.1	.1421-02
42	180.00	.18450	42.000	.8898-01	.1074	.1199	48.74	4.337	.4179	565.5	.1056-02
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	225.00	.22900-01	30.000	.7502	.9057	1.010	47.66	35.75	.4175	553.3	.8805-02
43	270.00	.91000-02	63.000	.4114	.4988	.5580	46.66	19.20	.4292	569.0	.4846-02
43	270.00	.11100-01	64.000	.8832	1.070	1.197	46.77	41.31	.4279	567.2	.1040-01

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A116)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
43	270.00	.13100-01	65.000	1.203	1.457	1.628	46.97	56.51	.4256	564.1	.1416-01
43	270.00	.17000-01	67.000	.8903	1.077	1.203	47.25	42.07	.4223	559.7	.1046-01
43	270.00	.20900-01	69.000	.8221	.9937	1.110	47.35	38.93	.4211	558.1	.9659-02
43	270.00	.24900-01	71.000	.7677	.9278	1.036	47.42	36.40	.4203	557.2	.9019-02
43	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	270.00	.28800-01	73.000	.6210	.7494	.8357	48.89	30.36	.4162	565.3	.7414-02
41	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	270.00	.36700-01	75.000	.5462	.6586	.7341	49.07	26.80	.4141	562.5	.6516-02
41	270.00	.40600-01	76.000	.4997	.6025	.6717	49.04	24.50	.4144	562.9	.5962-02
41	270.00	.48500-01	77.000	.4293	.5174	.5766	49.19	21.12	.4127	560.5	.5120-02
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
41	270.00	.76100-01	79.000	.2859	.3442	.3832	49.50	14.15	.4091	555.7	.3407-02
41	270.00	.95800-01	80.000	.2090	.2514	.2797	49.70	10.39	.4068	552.6	.2488-02
41	270.00	.11550	81.000	.1585	.1906	.2120	49.78	7.891	.4038	551.2	.1887-02
43	315.00	.15000-01	66.000	.9326	1.130	1.264	46.81	43.65	.4275	566.7	.1098-01
43	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
43	315.00	.22900-01	70.000	.7692	.9312	1.041	47.01	36.16	.4252	563.6	.9049-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A117)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = 9.000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
44	.0000	9.000	5.300	.5205+07	405.7	1269.	309.6	.5360	194.9	.2307-03	3627.	.2750-01
45	.0000	9.000	5.300	.4899+07	405.0	1317.	321.8	.5337	202.7	.2210-03	3698.	.2750-01
46	.0000	9.000	5.300	.4885+07	404.9	1319.	322.4	.5335	203.0	.2205-03	3702.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
44	.0000	.2572
45	.0000	.2576
46	.0000	.2577

***TEST DATA**

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
46	.00000	.91000-02	1.0000	.8457	1.027	1.151	46.92	39.68	.4341	583.3	.1006-01
46	.00000	.11100-01	2.0000	1.004	1.219	1.365	47.05	47.24	.4326	581.3	.1194-01
46	.00000	.13100-01	3.0000	.7977	.9663	1.081	47.53	37.91	.4270	573.7	.9468-02
46	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	.00000	.17000-01	5.0000	.8754	1.062	1.189	47.21	41.33	.4307	578.8	.1040-01
46	.00000	.19000-01	6.0000	.8346	1.012	1.133	47.27	39.45	.4301	577.9	.9916-02
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	.00000	.24900-01	9.0000	.6868	.8323	.9308	47.47	32.60	.4277	574.7	.8154-02
46	.00000	.26900-01	10.000	.6410	.7766	.8684	47.50	30.44	.4274	574.2	.7609-02
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	.00000	.32800-01	12.000	.5437	.6628	.7443	44.27	24.07	.4432	571.8	.6322-02
44	.00000	.36700-01	13.000	.4627	.5636	.6326	44.41	20.55	.4415	569.6	.5376-02
44	.00000	.40600-01	14.000	.5146	.6269	.7037	44.37	22.83	.4419	570.2	.5980-02
44	.00000	.48500-01	15.000	.4396	.5353	.6008	44.45	19.54	.4410	569.0	.5107-02
44	.00000	.56400-01	16.000	.4178	.5088	.5710	44.45	18.57	.4410	569.0	.4854-02
44	.00000	.76100-01	17.000	.3217	.3917	.4396	44.47	14.30	.4407	568.6	.3737-02
44	.00000	.95800-01	18.000	.2560	.3118	.3499	44.45	11.38	.4410	569.0	.2975-02
44	.00000	.11550	19.000	.2017	.2459	.2762	44.20	8.916	.4440	572.8	.2346-02

(R3A117)

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
44	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	.00000	.21400	22.000	.6001-01	.7305-01	.8196-01	44.53	2.672	.4399	567.6	.6969-03
45	2.0000	.24700-01	165.00	.6442	.7805	.8729	47.41	30.54	.4274	573.2	.7638-02
45	9.0000	.15000-01	157.00	.8170	.9899	1.107	47.40	38.73	.4275	573.3	.9687-02
45	9.0000	.17600-01	158.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	9.8000	.24700-01	164.00	.7240	.8772	.9810	47.40	34.32	.4275	573.3	.8584-02
46	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	10.000	.30800-01	92.000	.6436	.7796	.8718	47.53	30.59	.4270	573.7	.7639-02
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	14.600	.44200-01	169.00	.5151	.6229	.6956	47.86	24.65	.4221	566.1	.6097-02
46	18.500	.44200-01	106.00	.5227	.6328	.7072	47.71	24.94	.4249	570.9	.6200-02
45	19.600	.62900-01	175.00	.4288	.5184	.5789	47.92	20.55	.4214	565.2	.5074-02
46	19.800	.40800-01	101.00	.5681	.6879	.7690	47.64	27.06	.4258	572.1	.6741-02
46	20.000	.24900-01	89.000	.7537	.9139	1.022	47.33	35.67	.4293	576.9	.8953-02
46	20.000	.28800-01	91.000	.6946	.8417	.9414	47.47	32.97	.4277	574.7	.8247-02
46	20.000	.32800-01	93.000	.6395	.7748	.8664	47.51	30.39	.4272	574.0	.7591-02
45	21.800	.82200-01	182.00	.3483	.4209	.4700	47.99	16.71	.4206	564.1	.4121-02
46	22.200	.62900-01	125.00	.4367	.5281	.5899	47.92	20.93	.4224	567.6	.5176-02
46	22.400	.44200-01	107.00	.5458	.6606	.7382	47.75	26.06	.4244	570.3	.6474-02
45	22.600	.10270	192.00	.2827	.3417	.3815	48.00	13.57	.4205	564.0	.3345-02
46	23.000	.42000-01	105.00	.5597	.6776	.7573	47.69	26.69	.4252	571.3	.6639-02
46	23.400	.59600-01	120.00	.4457	.5391	.6022	47.89	21.34	.4228	568.2	.5284-02
44	23.900	.21310	250.00	.7462-01	.9085-01	.1019	44.52	3.323	.4400	567.7	.8667-03
46	24.100	.82200-01	139.00	.3564	.4311	.4816	47.86	17.06	.4231	568.5	.4225-02
45	24.400	.12440	207.00	.2335	.2826	.3158	47.70	11.14	.4240	568.6	.2766-02
44	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	24.800	.16810	223.00	.1401	.1708	.1917	44.30	6.207	.4428	571.3	.1629-02
46	24.900	.62900-01	126.00	.4398	.5319	.5940	47.92	21.08	.4224	567.6	.5212-02
45	25.000	.79500-01	178.00	.3643	.4403	.4915	47.99	17.48	.4206	564.1	.4310-02
45	25.300	.10000+00	186.00	.2969	.3588	.4006	47.99	14.24	.4206	564.2	.3512-02
45	25.300	.10270	191.00	.2922	.3531	.3942	47.99	14.02	.4206	564.2	.3457-02
46	25.500	.60700-01	124.00	.4484	.5423	.6057	47.92	21.49	.4224	567.6	.5315-02
45	26.000	.12440	206.00	.2358	.2853	.3187	47.72	11.25	.4238	568.4	.2792-02
46	26.300	.82200-01	140.00	.3371	.4077	.4554	47.92	16.16	.4224	567.6	.3996-02
45	26.700	.12100	199.00	.2437	.2948	.3293	47.78	11.65	.4230	567.4	.2886-02
44	26.800	.16810	222.00	.1373	.1673	.1879	44.31	6.085	.4426	571.0	.1596-02
44	27.000	.19040	237.00	.1084	.1320	.1481	44.48	4.821	.4406	569.4	.1259-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A117)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
44	27.100	.21310	249.00	.6364-01	.7745-01	.8688-01	44.59	2.838	.4392	566.7	.7389-03
45	27.200	.80300-01	180.00	.3676	.4443	.4961	47.98	17.64	.4207	564.2	.4350-02
45	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	27.400	.40100-01	98.000	.5029	.6087	.6803	47.72	24.00	.4248	570.8	.5965-02
45	27.400	.16480	215.00	.1442	.1745	.1949	47.79	6.892	.4229	567.2	.1708-02
46	27.600	.41600-01	102.00	.5833	.7061	.7892	47.71	27.83	.4249	570.9	.6919-02
45	27.600	.12440	205.00	.2376	.2875	.3212	47.72	11.34	.4238	568.4	.2814-02
44	27.600	.18700	230.00	.1020	.1242	.1394	44.47	4.535	.4407	568.6	.1185-02
44	27.700	.21010	243.00	.8542-01	.1040	.1167	44.53	3.804	.4399	567.6	.9920-03
45	27.900	.10110	188.00	.2937	.3549	.3962	47.99	14.09	.4206	564.1	.3474-02
46	28.000	.46800-01	110.00	.5255	.6359	.7106	47.77	25.10	.4243	570.1	.6232-02
44	28.200	.16810	221.00	.1453	.1771	.1988	44.32	6.441	.4425	570.9	.1689-02
45	28.300	.12200	201.00	.2410	.2916	.3257	47.79	11.52	.4230	567.3	.2854-02
44	28.300	.19040	236.00	.9894-01	.1205	.1352	44.52	4.404	.4402	567.9	.1149-02
46	28.400	.53500-01	114.00	.4982	.6027	.6734	47.83	23.83	.4235	569.0	.5906-02
44	28.400	.21310	248.00	.7456-01	.9073-01	.1018	44.60	3.325	.4391	566.5	.8657-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	28.800	.60400-01	121.00	.4424	.5351	.5976	47.93	21.21	.4223	567.4	.5244-02
45	28.800	.16580	217.00	.1406	.1700	.1899	47.84	6.725	.4223	566.4	.1664-02
44	28.900	.18800	232.00	.9985-01	.1216	.1364	44.48	4.442	.4406	568.4	.1160-02
46	29.000	.65700-01	129.00	.4400	.5320	.5942	47.95	21.10	.4221	567.2	.5214-02
44	29.000	.21110	244.00	.7481-01	.9106-01	.1022	44.55	3.333	.4397	567.3	.8688-03
46	29.200	.72400-01	133.00	.3954	.4782	.5341	47.91	18.94	.4226	567.9	.4686-02
46	29.300	.79500-01	136.00	.3568	.4315	.4819	47.93	17.10	.4223	567.5	.4229-02
46	29.600	.92500-01	143.00	.3308	.4001	.4469	47.91	15.85	.4226	567.8	.3921-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	29.900	.12100	198.00	.2447	.2959	.3304	47.85	11.71	.4222	566.2	.2896-02
45	30.200	.16480	214.00	.1263	.1527	.1706	47.84	6.042	.4223	566.4	.1495-02
44	30.200	.18700	229.00	.9559-01	.1164	.1306	44.51	4.255	.4402	567.9	.1110-02
44	30.300	.21010	242.00	.8082-01	.9838-01	.1104	44.55	3.601	.4397	567.3	.9386-03
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	31.500	.11100-01	83.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	32.100	.21010	241.00	.8573-01	.1044	.1171	44.53	3.817	.4400	567.7	.9957-03
45	32.200	.16480	213.00	.1311	.1586	.1772	47.83	6.272	.4225	566.7	.1552-02
44	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	32.200	.18700	228.00	.1096	.1335	.1498	44.48	4.876	.4406	568.4	.1273-02
45	32.300	.12100	197.00	.2517	.3044	.3400	47.84	12.04	.4223	566.4	.2979-02
45	32.300	.12300	194.00	.2330	.2818	.3148	47.77	11.13	.4231	567.5	.2758-02
45	32.300	.12730	208.00	.2317	.2803	.3131	47.75	11.06	.4234	567.9	.2743-02

DATE 28 AUG 79 AMES 3.5-237 FH-16 COLLATION DECK (R3A117)

FH16, ARC 3.5-237, ET NOSE (CLEAN)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
45	32.300	.13420	209.00	.2169	.2623	.2931	47.76	10.36	.4232	567.6	.2568-02
45	32.400	.10000+00	147.00	.3134	.3788	.4230	47.97	15.03	.4209	564.5	.3709-02
45	32.400	.10110	184.00	.3060	.3699	.4130	47.94	14.67	.4212	564.8	.3621-02
45	32.400	.10630	193.00	.2966	.3584	.4002	47.99	14.23	.4206	564.1	.3509-02
45	32.500	.85800-01	183.00	.3660	.4423	.4938	47.99	17.56	.4206	564.1	.4330-02
46	32.500	.92500-01	144.00	.3283	.3971	.4437	47.85	15.71	.4232	568.7	.3892-02
46	32.600	.79500-01	137.00	.3731	.4512	.5040	47.92	17.88	.4224	567.6	.4422-02
45	32.600	.80800-01	176.00	.3763	.4549	.5079	47.95	18.05	.4210	564.7	.4453-02
46	32.700	.67400-01	132.00	.4248	.5139	.5740	47.89	20.35	.4228	568.1	.5036-02
46	32.700	.72400-01	134.00	.4097	.4955	.5535	47.92	19.64	.4224	567.6	.4856-02
46	32.800	.65700-01	130.00	.4416	.5341	.5965	47.93	21.17	.4223	567.5	.5234-02
45	32.800	.16680	210.00	.1279	.1546	.1726	47.91	6.126	.4215	565.3	.1513-02
44	32.800	.18880	225.00	.9550-01	.1163	.1304	44.53	4.253	.4399	567.6	.1109-02
44	32.800	.21170	239.00	.8297-01	.1011	.1134	44.44	3.688	.4410	569.0	.9640-03
46	32.900	.58600-01	116.00	.4841	.5854	.6539	47.92	23.20	.4224	567.6	.5737-02
46	32.900	.60400-01	122.00	.4296	.5194	.5800	48.00	20.62	.4216	566.4	.5091-02
45	32.900	.61300-01	171.00	.4166	.5035	.5621	48.01	20.00	.4204	563.9	.4928-02
46	33.000	.53500-01	115.00	.5069	.6131	.6848	47.91	24.29	.4226	567.8	.6009-02
46	33.200	.46800-01	111.00	.5316	.6432	.7186	47.83	25.43	.4235	569.0	.6303-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	33.400	.42800-01	166.00	.5577	.6745	.7533	47.84	26.68	.4223	566.4	.6602-02
46	33.500	.40100-01	99.000	.5581	.6753	.7546	47.78	26.66	.4241	569.9	.6618-02
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	33.600	.38300-01	97.000	.5710	.6912	.7725	47.72	27.25	.4248	570.8	.6773-02
46	33.700	.36700-01	96.000	.6130	.7420	.8293	47.70	29.24	.4250	571.0	.7271-02
46	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	34.700	.18700	227.00	.9407-01	.1146	.1286	44.45	4.181	.4410	569.0	.1093-02
44	34.700	.21010	240.00	.9922-01	.1209	.1357	44.31	4.397	.4426	571.0	.1153-02
45	34.900	.16480	212.00	.1434	.1735	.1938	47.83	6.860	.4225	566.7	.1698-02
45	35.100	.10000+00	148.00	.3180	.3844	.4293	47.95	15.25	.4210	564.7	.3763-02
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	35.300	.22100-01	160.00	.8693	1.052	1.176	47.62	41.39	.4249	569.9	.1030-01
46	35.300	.92500-01	145.00	.3307	.3999	.4467	47.93	15.85	.4223	567.5	.3919-02
44	35.400	.18800	231.00	.1151	.1401	.1572	44.49	5.118	.4405	568.3	.1337-02
45	35.500	.12100	196.00	.2506	.3031	.3385	47.82	11.98	.4225	566.7	.2966-02
45	35.600	.16580	216.00	.1480	.1790	.1999	47.84	7.081	.4223	566.4	.1752-02
46	35.800	.80600-01	138.00	.3528	.4266	.4765	47.94	16.91	.4223	567.4	.4181-02
44	35.900	.21310	247.00	.9451-01	.1150	.1291	44.56	4.211	.4396	567.2	.1098-02
44	36.000	.19040	235.00	.1189	.1447	.1624	44.52	5.293	.4401	567.8	.1381-02
46	36.200	.72400-01	135.00	.3229	.3904	.4359	48.00	15.50	.4215	566.4	.3826-02
45	36.200	.16810	220.00	.1552	.1877	.2096	47.90	7.435	.4217	565.5	.1837-02
45	36.300	.12200	200.00	.2507	.3032	.3387	47.79	11.98	.4230	567.3	.2968-02
46	36.600	.65700-01	131.00	.4421	.5348	.5973	47.91	21.18	.4226	567.8	.5241-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A117)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
44	36.700	.18700	226.00	.1179	.1436	.1611	44.49	5.247	.4405	568.3	.1370-02
45	36.900	.10110	187.00	.3172	.3834	.4280	48.01	15.23	.4204	563.8	.3753-02
45	36.900	.16480	211.00	.1557	.1884	.2104	47.84	7.451	.4223	566.4	.1844-02
46	37.000	.60400-01	123.00	.4664	.5638	.6296	48.00	22.38	.4216	566.4	.5526-02
45	37.000	.12440	204.00	.2478	.2998	.3349	47.77	11.84	.4232	567.6	.2934-02
46	37.100	.58600-01	119.00	.4852	.5868	.6555	47.91	23.25	.4226	567.8	.5751-02
44	37.200	.21310	246.00	.9454-01	.1151	.1291	44.56	4.212	.4397	567.2	.1098-02
44	37.300	.19040	234.00	.1178	.1435	.1610	44.48	5.241	.4406	568.4	.1369-02
46	37.600	.53500-01	116.00	.4961	.6000	.6701	47.92	23.77	.4225	567.7	.5880-02
45	37.600	.16810	219.00	.1591	.1924	.2149	47.84	7.614	.4223	566.4	.1884-02
45	37.800	.10270	150.00	.3202	.3871	.4322	47.92	15.34	.4214	565.2	.3789-02
45	37.900	.12100	195.00	.2590	.3132	.3498	47.83	12.39	.4224	566.5	.3066-02
45	38.000	.80300-01	179.00	.3884	.4695	.5241	47.99	18.54	.4206	564.1	.4596-02
46	38.500	.46800-01	112.00	.5257	.6359	.7104	47.86	25.16	.4231	568.5	.6232-02
45	38.600	.12440	203.00	.2510	.3037	.3393	47.74	11.98	.4235	568.0	.2972-02
45	38.700	.10000+00	185.00	.3081	.3724	.4158	47.99	14.79	.4206	564.1	.3646-02
46	38.900	.82200-01	141.00	.3660	.4425	.4942	48.00	17.57	.4216	566.4	.4337-02
46	39.300	.41600-01	104.00	.5660	.6850	.7654	47.77	27.04	.4242	570.0	.6713-02
45	39.500	.10270	190.00	.3220	.3891	.4343	48.06	15.48	.4198	563.0	.3809-02
45	39.600	.16810	218.00	.1594	.1928	.2153	47.87	7.632	.4219	565.9	.1887-02
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	39.900	.19040	233.00	.1199	.1460	.1638	44.50	5.336	.4403	568.1	.1393-02
45	40.100	.79500-01	177.00	.3962	.4789	.5346	47.99	19.02	.4206	564.1	.4688-02
45	40.200	.12440	202.00	.2549	.3084	.3446	47.70	12.16	.4240	568.6	.3019-02
44	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	41.100	.60700-01	173.00	.4594	.5552	.6198	48.00	22.05	.4205	564.0	.5435-02
46	41.100	.82200-01	142.00	.3830	.4631	.5171	47.98	18.38	.4217	566.7	.4538-02
45	42.300	.10270	189.00	.3274	.3955	.4415	48.04	15.73	.4200	563.3	.3872-02
45	42.600	.59000-01	172.00	.4863	.5878	.6562	47.96	23.32	.4209	564.5	.5754-02
45	43.200	.42000-01	168.00	.5213	.6302	.7038	47.90	24.97	.4216	565.5	.6169-02
45	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	43.600	.62900-01	128.00	.4340	.5247	.5860	48.00	20.83	.4216	566.4	.5143-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	45.000	.22900-01	8.0000	.9140	1.109	1.242	47.12	43.07	.4318	580.2	.1086-01
45	46.100	.62900-01	174.00	.4668	.5642	.6299	48.00	22.41	.4205	564.0	.5523-02
45	47.700	.40800-01	167.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	48.400	.44200-01	109.00	.5698	.6893	.7701	47.85	27.27	.4232	568.7	.6755-02
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) (R3A117)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
45	65.200	.24700-01	162.00	.8373	1.013	1.131	47.77	40.00	.4231	567.5	.9914-02
44	90.000	.91000-02	44.000	1.327	1.620	1.821	43.93	58.30	.4473	577.0	.1545-01
44	90.000	.11100-01	45.000	1.338	1.633	1.834	44.10	59.02	.4452	574.4	.1557-01
44	90.000	.13100-01	46.000	1.230	1.500	1.684	44.24	54.42	.4435	572.2	.1430-01
44	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	90.000	.17000-01	48.000	.9274	1.129	1.268	44.45	41.22	.4410	569.0	.1077-01
44	90.000	.20900-01	50.000	.8335	1.015	1.138	44.54	37.12	.4399	567.5	.9681-02
44	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	90.000	.26900-01	53.000	.7302	.8880	.9957	44.74	32.67	.4374	564.3	.8473-02
44	90.000	.28800-01	54.000	.7138	.8681	.9733	44.75	31.95	.4373	564.1	.8283-02
44	90.000	.32800-01	55.000	.3902	.4742	.5314	44.91	17.52	.4354	561.7	.4525-02
44	90.000	.36700-01	56.000	.5738	.6974	.7815	44.88	25.75	.4357	562.2	.6655-02
46	90.000	.40600-01	57.000	.6467	.7816	.8726	48.08	31.10	.4206	565.1	.7661-02
46	90.000	.48500-01	58.000	.5686	.6868	.7664	48.24	27.43	.4187	562.6	.6732-02
46	90.000	.56400-01	59.000	.5419	.6545	.7303	48.26	26.15	.4185	562.4	.6416-02
46	90.000	.76100-01	60.000	.4596	.5552	.6196	48.22	22.16	.4190	563.0	.5442-02
46	90.000	.95800-01	61.000	.3863	.4668	.5210	48.16	18.61	.4196	563.8	.4575-02
46	90.000	.11550	62.000	.3132	.3786	.4228	47.98	15.03	.4217	566.7	.3711-02
44	135.00	.19000-01	49.000	.8198	.9966	1.117	44.83	36.75	.4364	563.0	.9509-02
44	135.00	.22900-01	51.000	.7492	.9102	1.020	44.96	33.68	.4348	560.9	.8686-02
44	180.00	.91000-02	23.000	.5150	.6291	.7075	43.81	22.56	.4488	579.0	.5999-02
44	180.00	.11100-01	24.000	.9749	1.188	1.333	44.38	43.26	.4418	570.0	.1133-01
44	180.00	.13100-01	25.000	.8895	1.082	1.214	44.62	39.68	.4389	566.3	.1033-01
44	180.00	.15000-01	26.000	.8756	1.065	1.194	44.75	39.18	.4373	564.1	.1016-01
44	180.00	.17000-01	27.000	.8236	1.001	1.122	44.83	36.92	.4364	563.0	.9554-02
44	180.00	.19000-01	28.000	.7874	.9568	1.072	44.91	35.36	.4353	561.6	.9131-02
44	180.00	.20900-01	29.000	.7323	.8896	.9966	44.98	32.94	.4345	560.6	.8489-02
44	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	180.00	.28800-01	32.000	.5808	.7055	.7904	44.99	26.13	.4343	560.3	.6733-02
44	180.00	.32800-01	33.000	.5280	.6414	.7186	44.98	23.75	.4345	560.5	.6121-02
45	180.00	.36700-01	34.000	.5666	.6722	.7500	48.19	26.82	.4183	561.0	.6581-02
45	180.00	.40600-01	35.000	.5042	.6092	.6800	48.06	24.23	.4198	563.0	.5964-02
45	180.00	.48500-01	36.000	.4529	.5477	.6117	47.85	21.67	.4223	566.3	.5361-02
45	180.00	.56400-01	37.000	.4277	.5171	.5775	47.89	20.48	.4218	565.7	.5062-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
45	180.00	.95800-01	39.000	.2741	.3318	.3708	47.60	13.05	.4251	570.2	.3247-02
45	180.00	.11550	40.000	.2153	.2608	.2916	47.46	10.02	.4268	572.4	.2552-02
45	180.00	.16480	41.000	.1176	.1425	.1594	47.42	5.579	.4273	573.0	.1395-02
45	180.00	.18450	42.000	.8764-01	.1061	.1186	47.61	4.172	.4251	570.1	.1038-02
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	225.00	.22900-01	30.000	.6579	.7992	.8953	44.98	29.59	.4344	560.5	.7627-02
44	270.00	.91000-02	63.000	.3616	.4413	.4960	44.02	15.92	.4463	575.7	.4209-02
44	270.00	.11100-01	64.000	.6183	.7541	.8472	44.14	27.30	.4447	573.7	.7193-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A117)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
44	270.00	.13100-01	65.000	.9616	1.172	1.315	44.34	42.63	.4424	570.7	.1118-01
44	270.00	.17000-01	67.000	.7865	.9571	1.074	44.59	35.07	.4393	566.7	.9132-02
44	270.00	.20900-01	69.000	.7074	.8604	.9648	44.70	31.62	.4379	564.9	.8210-02
44	270.00	.24900-01	71.000	.6582	.8005	.8975	44.75	29.46	.4373	564.1	.7638-02
44	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	270.00	.28800-01	73.000	.5877	.7099	.7923	48.20	28.33	.4192	563.2	.6959-02
46	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	270.00	.36700-01	75.000	.5198	.6278	.7005	48.26	25.08	.4185	562.4	.6154-02
46	270.00	.40600-01	76.000	.4773	.5765	.6432	48.27	23.04	.4184	562.2	.5651-02
46	270.00	.48500-01	77.000	.4108	.4961	.5535	48.29	19.84	.4181	561.8	.4863-02
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
46	270.00	.76100-01	79.000	.2618	.3162	.3528	48.30	12.65	.4180	561.6	.3099-02
46	270.00	.95800-01	80.000	.1863	.2250	.2510	48.26	8.990	.4185	562.4	.2205-02
46	270.00	.11550	81.000	.1369	.1655	.1847	48.07	6.581	.4207	565.3	.1622-02
44	315.00	.15000-01	66.000	.8859	.9861	1.103	44.17	35.57	.4444	573.3	.9368-02
44	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
44	315.00	.22900-01	70.000	.6754	.8228	.9235	44.39	29.98	.4417	569.9	.7849-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A123)

E.T. OGIVE PARAMETRIC DATA

ALPHA = 5.000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
35	5.000	.0000	5.300	.5051+07	405.5	1293.	315.7	.5350	198.8	.2259-03	3663.	.2750-01
36	5.000	.0000	5.300	.4818+07	405.7	1332.	325.8	.5342	205.1	.2185-03	3721.	.2750-01
37	5.000	.0000	5.300	.4880+07	405.5	1321.	322.9	.5342	203.4	.2204-03	3705.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
35	.0000	.2575
36	.0000	.2581
37	.0000	.2579

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
35	.00000	.91000-02	1.0000	.4126	.5020	.5630	45.57	18.80	.4384	576.8	.4848-02
35	.00000	.11100-01	2.0000	.9668	1.175	1.317	45.82	44.30	.4355	572.9	.1135-01
35	.00000	.13100-01	3.0000	.7101	.8619	.9651	46.09	32.73	.4323	568.7	.8328-02
35	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	.00000	.17000-01	5.0000	.8412	1.020	1.141	46.32	38.97	.4294	564.9	.9856-02
35	.00000	.19000-01	6.0000	.8356	1.013	1.132	46.46	38.82	.4278	562.8	.9786-02
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	.00000	.24900-01	9.0000	.7223	.8744	.9774	46.68	33.71	.4252	559.4	.8452-02
35	.00000	.26900-01	10.000	.6868	.8312	.9289	46.74	32.10	.4244	558.4	.8035-02
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	.00000	.32800-01	12.000	.5576	.6720	.7487	48.91	27.27	.4124	555.0	.6591-02
37	.00000	.36700-01	13.000	.4558	.5491	.6118	48.97	22.32	.4116	553.9	.5387-02
37	.00000	.40600-01	14.000	.4943	.5957	.6637	48.92	24.18	.4123	554.9	.5843-02
37	.00000	.48500-01	15.000	.4159	.5011	.5583	48.93	20.35	.4121	554.6	.4915-02
37	.00000	.56400-01	16.000	.3898	.4697	.5233	48.93	19.07	.4121	554.7	.4607-02
37	.00000	.76100-01	17.000	.2844	.3427	.3818	48.92	13.91	.4123	554.9	.3361-02
37	.00000	.95800-01	18.000	.2173	.2619	.2918	48.90	10.63	.4124	555.1	.2569-02
37	.00000	.11550	19.000	.1645	.1984	.2212	48.75	8.021	.4142	557.4	.1946-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A123)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
37	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	.00000	.18450	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	.00000	.21400	22.000	.3716-01	.4476-01	.4986-01	49.03	1.822	.4109	553.1	.4391-03
36	2.0000	.24700-01	165.00	.6719	.8114	.9055	48.82	32.80	.4186	568.3	.7997-02
35	9.0000	.15000-01	157.00	.7518	.9084	1.014	48.71	36.62	.4199	570.2	.8952-02
36	9.0000	.17600-01	159.00	.8123	.9812	1.095	48.77	39.62	.4192	569.1	.9670-02
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	9.8000	.24700-01	164.00	.7269	.8785	.9808	48.65	35.37	.4206	571.0	.8657-02
35	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26300-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	10.000	.30800-01	92.000	.6260	.7580	.8473	46.64	29.20	.4256	560.0	.7326-02
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	14.600	.44200-01	169.00	.4607	.5559	.6199	49.04	22.59	.4161	564.9	.5479-02
35	18.500	.44200-01	106.00	.4752	.5753	.6431	46.67	22.18	.4253	559.5	.5561-02
36	19.600	.62900-01	175.00	.3454	.4168	.4649	49.02	16.93	.4164	565.3	.4108-02
35	19.800	.40800-01	101.00	.5102	.6179	.6907	46.61	23.78	.4260	560.4	.5972-02
35	20.000	.24900-01	89.000	.7359	.8926	.9989	46.25	34.03	.4303	566.2	.8625-02
35	20.000	.28800-01	91.000	.6549	.7937	.8877	46.43	30.41	.4281	563.2	.7670-02
35	20.000	.32800-01	93.000	.5963	.7224	.8079	46.50	27.73	.4273	562.2	.6982-02
36	21.800	.82200-01	182.00	.2603	.3141	.3503	49.03	12.76	.4163	565.2	.3096-02
35	22.200	.62900-01	125.00	.3549	.4294	.4798	46.80	16.61	.4237	557.4	.4151-02
35	22.400	.44200-01	107.00	.4786	.5794	.6477	46.65	22.33	.4255	559.7	.5601-02
36	22.600	.10270	192.00	.1923	.2320	.2588	49.03	9.426	.4163	565.2	.2287-02
35	23.000	.42000-01	105.00	.5000	.6056	.6770	46.60	23.30	.4262	560.7	.5853-02
35	23.400	.59600-01	120.00	.3645	.4412	.4930	46.74	17.04	.4244	558.3	.4264-02
37	23.900	.21310	250.00	.3530-01	.4255-01	.4742-01	48.84	1.724	.4131	556.0	.4173-03
35	24.100	.82200-01	139.00	.2655	.3213	.3590	46.74	12.41	.4244	558.4	.3106-02
36	24.400	.12440	207.00	.1474	.1780	.1986	48.85	7.199	.4183	567.9	.1754-02
37	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	24.800	.16810	223.00	.7712-01	.9305-01	.1038	48.60	3.748	.4159	559.7	.9125-03
35	24.900	.62900-01	126.00	.3526	.4267	.4768	46.75	16.48	.4244	558.3	.4125-02
36	25.000	.79500-01	178.00	.2720	.3282	.3661	49.00	13.33	.4165	565.5	.3235-02
36	25.300	.10000+00	186.00	.2022	.2440	.2722	49.01	9.909	.4165	565.5	.2405-02
36	25.300	.10270	191.00	.1944	.2347	.2617	49.00	9.528	.4165	565.5	.2313-02
35	25.500	.60700-01	124.00	.3613	.4372	.4886	46.74	16.89	.4244	558.4	.4226-02
36	26.000	.12440	206.00	.1485	.1794	.2002	48.82	7.250	.4187	568.4	.1768-02
35	26.300	.82200-01	140.00	.2495	.3020	.3374	46.76	11.67	.4242	558.1	.2919-02
36	26.700	.12100	199.00	.1524	.1840	.2053	48.88	7.449	.4180	567.5	.1814-02
37	26.800	.16810	222.00	.7341-01	.8858-01	.9878-01	48.60	3.568	.4159	559.7	.8686-03
37	27.000	.19040	237.00	.5365-01	.6469-01	.7212-01	48.75	2.616	.4142	557.4	.6345-03

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A123)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
37	27.100	.21310	248.00	.3137-01	.3782-01	.4214-01	48.84	1.532	.4131	556.0	.3709-03
36	27.200	.80300-01	180.00	.2720	.3283	.3661	49.00	13.33	.4165	565.5	.3236-02
36	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	27.400	.40100-01	98.000	.4727	.5727	.6403	46.54	22.00	.4269	561.6	.5535-02
36	27.400	.16480	215.00	.7644-01	.9228-01	.1029	48.94	3.741	.4172	566.5	.9095-03
35	27.600	.41600-01	102.00	.5107	.6187	.6918	46.54	23.77	.4269	561.6	.5979-02
36	27.600	.12440	205.00	.1497	.1807	.2017	48.86	7.313	.4182	567.8	.1781-02
37	27.600	.18700	230.00	.5161-01	.6224-01	.6939-01	48.71	2.514	.4147	558.1	.6104-03
37	27.700	.21010	243.00	.4232-01	.5103-01	.5689-01	48.77	2.064	.4140	557.2	.5005-03
36	27.900	.10110	188.00	.1995	.2408	.2685	49.00	9.776	.4165	565.5	.2373-02
35	28.000	.46800-01	110.00	.4448	.5387	.6023	46.57	20.71	.4265	561.1	.5206-02
37	28.200	.16810	221.00	.7706-01	.9297-01	.1037	48.60	3.745	.4159	559.7	.9118-03
36	28.300	.12200	201.00	.1521	.1837	.2049	48.92	7.443	.4175	566.8	.1810-02
37	28.300	.19040	236.00	.4534-01	.5467-01	.6094-01	48.75	2.210	.4142	557.4	.5362-03
35	28.400	.53500-01	114.00	.4139	.5013	.5604	46.62	19.30	.4259	560.3	.4845-02
37	28.400	.21310	248.00	.3514-01	.4236-01	.4720-01	48.84	1.716	.4131	556.0	.4154-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	28.800	.60400-01	121.00	.3579	.4332	.4841	46.73	16.73	.4246	558.5	.4188-02
36	28.800	.16580	217.00	.7214-01	.8708-01	.9715-01	48.94	3.531	.4172	566.4	.8583-03
37	28.900	.18800	232.00	.5029-01	.6066-01	.6762-01	48.71	2.450	.4147	558.1	.5949-03
35	29.000	.65700-01	129.00	.3447	.4172	.4662	46.73	16.11	.4246	558.6	.4032-02
37	29.000	.21110	244.00	.3558-01	.4289-01	.4781-01	48.79	1.736	.4137	556.9	.4207-03
35	29.200	.72400-01	133.00	.3019	.3655	.4084	46.72	14.11	.4247	558.8	.3533-02
35	29.300	.79500-01	136.00	.2634	.3188	.3562	46.75	12.31	.4244	558.3	.3081-02
35	29.600	.92500-01	143.00	.2347	.2841	.3175	46.73	10.97	.4246	558.6	.2746-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	29.900	.12100	198.00	.1551	.1872	.2089	48.93	7.589	.4174	566.7	.1845-02
36	30.200	.16480	214.00	.6486-01	.7829-01	.8734-01	48.94	3.174	.4172	566.5	.7717-03
37	30.200	.18700	229.00	.4773-01	.5755-01	.6416-01	48.75	2.327	.4142	557.4	.5645-03
37	30.300	.21010	242.00	.4011-01	.4836-01	.5391-01	48.78	1.957	.4138	557.0	.4743-03
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	31.500	.11100-01	83.000	1.141	1.388	1.556	45.59	52.00	.4382	576.5	.1340-01
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	32.100	.21010	241.00	.4081-01	.4921-01	.5486-01	48.75	1.990	.4142	557.4	.4827-03
36	32.200	.16480	213.00	.6792-01	.8199-01	.9147-01	48.93	3.323	.4174	566.7	.8081-03
37	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	32.200	.18700	228.00	.5509-01	.6645-01	.7408-01	48.68	2.682	.4150	558.6	.6516-03
36	32.300	.12100	197.00	.1580	.1908	.2129	48.87	7.721	.4181	567.6	.1880-02
36	32.300	.12300	194.00	.1457	.1760	.1964	48.82	7.113	.4187	568.5	.1734-02
36	32.300	.12730	208.00	.1418	.1713	.1911	48.83	6.925	.4186	568.3	.1688-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A123)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
36	32.300	.13420	209.00	.1324	.1598	.1783	48.89	6.472	.4178	567.3	.1575-02
36	32.400	.10000+00	147.00	.2114	.2552	.2846	48.94	10.34	.4173	566.5	.2515-02
36	32.400	.10110	184.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	32.400	.10630	193.00	.1952	.2356	.2628	48.95	9.555	.4171	566.3	.2322-02
36	32.500	.85800-01	183.00	.2530	.3054	.3406	48.94	12.38	.4172	566.4	.3010-02
35	32.500	.92500-01	144.00	.2299	.2783	.3111	46.67	10.73	.4253	559.5	.2690-02
35	32.600	.79500-01	137.00	.2739	.3316	.3706	46.67	12.78	.4253	559.5	.3205-02
36	32.600	.80800-01	176.00	.2749	.3318	.3702	48.92	13.44	.4175	566.9	.3270-02
35	32.700	.67400-01	132.00	.3274	.3964	.4431	46.66	15.28	.4254	559.7	.3832-02
35	32.700	.72400-01	134.00	.3122	.3780	.4225	46.67	14.57	.4253	559.5	.3654-02
35	32.800	.65700-01	130.00	.3418	.4138	.4626	46.65	15.95	.4255	559.7	.4000-02
36	32.800	.16680	210.00	.6720-01	.8112-01	.9048-01	48.95	3.290	.4171	566.3	.7995-03
37	32.800	.18880	225.00	.4410-01	.5318-01	.5928-01	48.75	2.150	.4142	557.4	.5216-03
37	32.800	.21170	239.00	.3870-01	.4669-01	.5207-01	48.61	1.881	.4158	559.7	.4579-03
35	32.900	.58600-01	118.00	.3901	.4723	.5279	46.65	18.20	.4255	559.7	.4565-02
35	32.900	.60400-01	122.00	.3715	.4134	.4620	46.67	15.94	.4253	559.5	.3996-02
36	32.900	.61300-01	171.00	.3311	.3996	.4456	49.01	16.23	.4164	565.4	.3938-02
35	33.000	.53500-01	115.00	.4136	.5009	.5600	46.60	19.28	.4261	560.6	.4841-02
35	33.200	.46800-01	111.00	.4330	.5245	.5866	46.52	20.14	.4271	561.8	.5069-02
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	33.400	.42800-01	166.00	.4786	.5779	.6448	48.87	23.39	.4181	567.6	.5695-02
35	33.500	.40100-01	99.000	.4983	.6039	.6754	46.45	23.15	.4279	562.9	.5836-02
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	33.600	.38300-01	97.000	.5217	.6324	.7074	46.40	24.21	.4285	563.8	.6111-02
35	33.700	.36700-01	96.000	.5501	.6669	.7461	46.38	25.51	.4288	564.1	.6445-02
35	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	34.700	.18700	227.00	.4828-01	.5824-01	.6495-01	48.63	2.347	.4156	559.4	.5712-03
37	34.700	.21010	240.00	.4527-01	.5461-01	.6090-01	48.61	2.200	.4158	559.7	.5356-03
36	34.900	.16480	212.00	.7564-01	.9133-01	.1019	48.89	3.698	.4179	567.4	.9001-03
36	35.100	.10000+00	148.00	.2136	.2578	.2876	48.93	10.45	.4174	566.7	.2541-02
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	35.300	.22100-01	160.00	.6523	.7884	.8802	48.64	31.73	.4207	571.2	.7769-02
35	35.300	.92500-01	145.00	.2305	.2790	.3119	46.69	10.76	.4250	559.2	.2697-02
37	35.400	.18800	231.00	.5679-01	.6850-01	.7637-01	48.68	2.764	.4150	558.6	.6718-03
36	35.500	.12100	196.00	.1571	.1897	.2116	48.84	7.671	.4184	568.0	.1869-02
36	35.600	.16580	216.00	.7897-01	.9535-01	.1064	48.89	3.861	.4178	567.2	.9397-03
35	35.800	.80600-01	138.00	.2593	.3139	.3509	46.65	12.10	.4255	559.7	.3034-02
37	35.900	.21310	247.00	.4189-01	.5052-01	.5631-01	48.75	2.042	.4142	557.4	.4954-03
37	36.000	.19040	235.00	.5827-01	.7029-01	.7837-01	48.68	2.837	.4150	558.6	.6894-03
35	36.200	.72400-01	135.00	.2612	.3161	.3533	46.69	12.19	.4250	559.1	.3056-02
36	36.200	.16810	220.00	.8187-01	.9884-01	.1103	48.93	4.006	.4174	566.7	.9741-03
36	36.300	.12200	200.00	.1564	.1888	.2107	48.82	7.633	.4187	568.4	.1861-02
35	36.600	.65700-01	131.00	.3408	.4125	.4611	46.67	15.90	.4253	559.5	.3987-02

FH15, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A123)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
37	36.700	.18700	226.00	.5946-01	.7173-01	.7999-01	48.64	2.892	.4155	559.2	.7035-03
36	36.900	.10110	187.00	.2130	.2571	.2868	48.96	10.43	.4170	566.2	.2534-02
36	36.900	.16480	211.00	.8275-01	.9989-01	.1114	48.93	4.049	.4174	566.7	.9846-03
35	37.000	.60400-01	123.00	.3689	.4466	.4992	46.65	17.21	.4255	559.7	.4317-02
36	37.000	.12440	204.00	.1538	.1857	.2073	48.80	7.505	.4188	568.6	.1831-02
35	37.100	.58600-01	119.00	.3859	.4674	.5226	46.56	17.97	.4266	561.2	.4517-02
37	37.200	.21310	246.00	.4150-01	.5004-01	.5578-01	48.75	2.023	.4142	557.4	.4908-03
37	37.300	.19040	234.00	.5925-01	.7149-01	.7972-01	48.62	2.881	.4157	559.5	.7010-03
35	37.600	.53500-01	116.00	.4004	.4849	.5421	46.59	18.66	.4262	560.7	.4687-02
36	37.600	.16810	219.00	.8313-01	.1004	.1120	48.88	4.063	.4180	567.5	.9892-03
35	37.800	.10270	150.00	.2089	.2523	.2815	48.87	10.21	.4181	567.6	.2487-02
36	37.900	.12100	195.00	.1624	.1961	.2189	48.80	7.924	.4189	568.7	.1933-02
36	38.000	.80300-01	179.00	.2865	.3458	.3858	48.93	14.02	.4174	566.7	.3408-02
35	38.500	.46800-01	112.00	.4361	.5283	.5908	46.51	20.29	.4272	562.0	.5106-02
36	38.600	.12440	203.00	.1554	.1878	.2096	48.77	7.581	.4192	569.2	.1850-02
36	38.700	.10000+00	185.00	.2080	.2511	.2801	48.95	10.18	.4172	566.4	.2474-02
35	38.900	.82200-01	141.00	.2665	.3227	.3607	46.65	12.43	.4255	559.8	.3119-02
35	39.300	.41500-01	104.00	.4840	.5866	.6562	46.39	22.45	.4286	563.9	.5669-02
36	39.500	.10270	190.00	.2117	.2555	.2850	49.00	10.37	.4165	565.5	.2518-02
36	39.600	.16810	218.00	.8455-01	.1021	.1139	48.89	4.134	.4178	567.2	.1006-02
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	39.900	.19040	233.00	.6030-01	.7275-01	.8112-01	48.63	2.932	.4156	559.3	.7134-03
36	40.100	.79500-01	177.00	.2898	.3498	.3902	48.94	14.18	.4172	566.4	.3448-02
36	40.200	.12440	202.00	.1555	.1879	.2097	48.75	7.581	.4195	569.5	.1851-02
37	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	41.100	.60700-01	173.00	.3629	.4380	.4886	48.94	17.76	.4172	566.5	.4317-02
35	41.100	.82200-01	142.00	.2788	.3376	.3774	46.61	12.99	.4260	560.4	.3263-02
36	42.300	.10270	189.00	.2156	.2602	.2903	48.95	10.55	.4171	566.3	.2565-02
36	42.600	.59600-01	172.00	.3846	.4642	.5179	48.93	18.82	.4174	566.7	.4576-02
36	43.200	.42000-01	168.00	.4415	.5332	.5950	48.82	21.56	.4186	568.4	.5255-02
36	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	43.600	.62900-01	128.00	.3440	.4166	.4657	46.58	16.02	.4263	560.9	.4026-02
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	45.000	.22900-01	8.0000	1.059	1.286	1.440	46.08	48.81	.4323	568.8	.1242-01
36	46.100	.62900-01	174.00	.3629	.4381	.4887	48.94	17.76	.4173	566.5	.4318-02
36	47.700	.40800-01	167.00	.5001	.6040	.6741	48.80	24.41	.4188	568.7	.5953-02
35	48.400	.44200-01	109.00	.4638	.5623	.6290	46.38	21.51	.4288	564.1	.5434-02
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A123)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
36	65.200	.24700-01	162.00	.7827	.9471	1.058	48.37	37.86	.4239	575.5	.9331-02
37	90.000	.91000-02	44.000	.8893	1.077	1.204	47.74	42.46	.4260	573.3	.1056-01
37	90.000	.11100-01	45.000	1.225	1.483	1.657	47.81	58.57	.4251	572.1	.1453-01
37	90.000	.13100-01	46.000	1.071	1.296	1.448	47.90	51.29	.4241	570.8	.1270-01
37	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	90.000	.17000-01	48.000	.8841	1.069	1.194	48.02	42.46	.4227	568.9	.1048-01
37	90.000	.20900-01	50.000	.8080	.9769	1.091	48.10	38.87	.4217	567.6	.9577-02
37	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	90.000	.26900-01	53.000	.6671	.8061	.8999	48.25	32.19	.4200	565.3	.7903-02
37	90.000	.28800-01	54.000	.6440	.7779	.8681	48.32	31.12	.4191	564.1	.7627-02
37	90.000	.32800-01	55.000	.3370	.4068	.4538	48.51	16.35	.4170	561.2	.3989-02
37	90.000	.36700-01	56.000	.4863	.5871	.6550	48.47	23.57	.4174	561.8	.5757-02
35	90.000	.40600-01	57.000	.5190	.6300	.7055	46.07	23.31	.4325	569.0	.6087-02
35	90.000	.48500-01	58.000	.4641	.5630	.6301	46.23	21.46	.4306	566.4	.5440-02
35	90.000	.56400-01	59.000	.4390	.5325	.5959	46.27	20.31	.4301	565.8	.5145-02
35	90.000	.76100-01	60.000	.3456	.4190	.4689	46.30	16.00	.4297	565.3	.4049-02
35	90.000	.95800-01	61.000	.2683	.3253	.3640	46.32	12.43	.4295	565.1	.3144-02
35	90.000	.11550	62.000	.2084	.2528	.2829	46.24	9.638	.4304	566.2	.2443-02
37	135.00	.19000-01	49.000	.8618	1.042	1.163	48.18	41.52	.4208	566.4	.1021-01
37	135.00	.22900-01	51.000	.7722	.9330	1.041	48.28	37.28	.4196	564.8	.9148-02
37	180.00	.91000-02	23.000	.4927	.5969	.6674	47.66	23.49	.4268	574.5	.5850-02
37	180.00	.11100-01	24.000	1.206	1.458	1.628	48.10	58.02	.4217	567.6	.1430-01
37	180.00	.13100-01	25.000	1.076	1.300	1.451	48.32	52.01	.4191	564.1	.1275-01
37	180.00	.15000-01	26.000	1.046	1.263	1.409	48.40	50.61	.4183	563.0	.1238-01
37	180.00	.17000-01	27.000	.9346	1.128	1.258	48.51	45.34	.4170	561.2	.1106-01
37	180.00	.19000-01	28.000	.8788	1.061	1.183	48.55	42.66	.4165	560.6	.1040-01
37	180.00	.20900-01	29.000	.8140	.9820	1.095	48.64	39.59	.4155	559.2	.9631-02
37	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	180.00	.28800-01	32.000	.6568	.7917	.8823	48.84	32.08	.4132	556.1	.7765-02
37	180.00	.32800-01	33.000	.5941	.7159	.7978	48.90	29.05	.4124	555.1	.7022-02
36	180.00	.36700-01	34.000	.6357	.7669	.8552	49.10	31.21	.4154	564.0	.7560-02
36	180.00	.40600-01	35.000	.5709	.6887	.7679	49.10	28.03	.4154	564.0	.6789-02
36	180.00	.48500-01	36.000	.5285	.6377	.7112	49.05	25.93	.4160	564.8	.6286-02
36	180.00	.56400-01	37.000	.5004	.6036	.6729	49.15	24.60	.4148	563.2	.5950-02
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	180.00	.95800-01	39.000	.3384	.4083	.4552	49.09	16.61	.4155	564.1	.4024-02
36	180.00	.11550	40.000	.2746	.3315	.3698	48.97	13.45	.4169	566.0	.3267-02
36	180.00	.16480	41.000	.1651	.1993	.2223	48.98	8.087	.4167	565.8	.1964-02
36	180.00	.18450	42.000	.1270	.1532	.1708	49.15	6.244	.4148	563.2	.1510-02
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	225.00	.22900-01	30.000	.7493	.9024	1.005	49.06	36.76	.4106	552.6	.8853-02
37	270.00	.91000-02	63.000	.7633	.9224	1.030	48.24	36.82	.4202	565.5	.9043-02
37	270.00	.11100-01	64.000	1.198	1.447	1.614	48.45	58.05	.4176	562.1	.1418-01

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A123)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
37	270.00	.13100-01	65.000	1.063	1.282	1.429	48.72	51.79	.4145	557.9	.1257-01
37	270.00	.17000-01	67.000	.8734	1.052	1.172	48.99	42.79	.4114	553.7	.1032-01
37	270.00	.20900-01	69.000	.7913	.9527	1.061	49.13	38.87	.4098	551.6	.9346-02
37	270.00	.24900-01	71.000	.7255	.8735	.9726	49.14	35.65	.4097	551.4	.8569-02
37	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	270.00	.28800-01	73.000	.6220	.7521	.8400	46.95	29.20	.4219	555.1	.7271-02
35	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	270.00	.36700-01	75.000	.5580	.6751	.7542	46.83	26.13	.4234	557.1	.6526-02
35	270.00	.40600-01	76.000	.5178	.6266	.7002	46.76	24.21	.4242	558.1	.6057-02
35	270.00	.48500-01	77.000	.4657	.5638	.6302	46.67	21.74	.4252	559.4	.5450-02
0	270.00	.55400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
35	270.00	.76100-01	79.000	.3474	.4210	.4708	46.45	16.13	.4279	563.0	.4068-02
35	270.00	.95800-01	80.000	.2724	.3301	.3693	46.43	12.65	.4281	563.3	.3190-02
35	270.00	.11550	81.000	.2186	.2650	.2966	46.29	10.12	.4299	565.5	.2561-02
37	315.00	.15000-01	66.000	.8975	1.082	1.206	48.84	43.84	.4131	556.0	.1061-01
37	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
37	315.00	.22900-01	70.000	.7266	.8750	.9744	49.10	35.68	.4101	552.0	.8583-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A205)

E.T. OGIVE PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
5	-5.000	.0000	5.300	.4825+07	405.0	1329.	325.1	.5334	204.7	.2186-03	3717.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
5	.0000	.2578

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	.00000	.91000-02	1.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.11100-01	2.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.13100-01	3.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.17000-01	5.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.19000-01	6.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.24900-01	9.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.26900-01	10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	.00000	.32800-01	12.000	.6395	.7726	.8624	48.59	31.07	.4197	568.6	.7610-02
5	.00000	.36700-01	13.000	.5593	.6755	.7539	48.64	27.20	.4191	567.8	.6655-02
5	.00000	.40600-01	14.000	.6204	.7498	.8371	48.52	30.11	.4204	569.6	.7385-02
5	.00000	.48500-01	15.000	.5614	.6782	.7571	48.58	27.27	.4198	568.7	.6681-02
5	.00000	.56400-01	16.000	.5420	.6548	.7309	48.58	26.33	.4197	568.7	.6450-02
5	.00000	.76100-01	17.000	.4522	.5466	.6103	48.46	21.91	.4212	570.7	.5384-02
5	.00000	.95800-01	18.000	.3851	.4654	.5196	48.52	18.68	.4205	569.7	.4585-02
5	.00000	.11550	19.000	.3041	.3678	.4109	48.31	14.69	.4228	572.9	.3623-02
5	.00000	.13480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	.00000	.15400	21.000	.1373	.1660	.1854	48.37	6.640	.4222	572.0	.1635-02
5	.00000	.21400	22.000	.9469-01	.1146	.1281	48.15	4.559	.4247	575.5	.1129-02
0	2.0000	.24700-01	165.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A205)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	9.0000	.15000-01	157.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.17600-01	158.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.8000	.24700-01	164.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.30800-01	92.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	14.600	.44200-01	169.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	18.500	.44200-01	106.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	19.600	.62900-01	175.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	19.800	.40800-01	101.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	20.000	.24900-01	89.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	20.000	.28800-01	91.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	20.000	.32800-01	93.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	21.800	.82200-01	182.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	22.200	.62900-01	125.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	22.400	.44200-01	107.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	22.600	.10270	192.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	23.000	.42000-01	105.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	23.400	.59600-01	120.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	23.900	.21310	250.00	.9900-01	.1196	.1336	48.53	4.804	.4204	569.6	.1178-02
0	24.100	.82200-01	139.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	24.400	.12440	207.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	24.800	.16810	223.00	.1934	.2341	.2616	48.21	9.327	.4240	574.5	.2305-02
0	24.900	.62900-01	126.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.000	.79500-01	178.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.300	.10000+00	186.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.300	.10270	191.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.500	.60700-01	124.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	26.000	.12440	206.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	26.300	.82200-01	140.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	26.700	.12100	199.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	26.800	.16810	222.00	.2247	.2720	.3039	48.21	10.84	.4240	574.5	.2678-02
5	27.000	.19040	237.00	.1834	.2219	.2478	48.33	8.865	.4226	572.6	.2185-02
5	27.100	.21310	249.00	.1120	.1353	.1511	48.51	5.432	.4205	569.7	.1333-02
0	27.200	.80300-01	180.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.400	.40100-01	98.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A205)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	27.400	.16480	215.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.600	.41600-01	102.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.600	.12440	205.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	27.600	.18700	230.00	.2160	.2614	.2920	48.26	10.43	.4235	573.7	.2574-02
5	27.700	.21010	243.00	.1835	.2219	.2479	48.36	8.874	.4223	572.2	.2186-02
0	27.900	.10110	188.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	28.000	.46800-01	110.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	28.200	.16810	221.00	.2791	.3374	.3768	48.42	13.51	.4216	571.3	.3323-02
0	28.300	.12200	201.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	28.300	.19040	236.00	.1670	.2020	.2257	48.26	8.059	.4235	573.7	.1990-02
0	28.400	.53500-01	114.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	28.400	.21310	248.00	.1347	.1629	.1819	48.42	6.522	.4216	571.3	.1604-02
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	28.800	.60400-01	121.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	28.800	.16580	217.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	28.900	.18800	232.00	.2356	.2850	.3185	48.24	11.36	.4237	574.1	.2807-02
0	29.000	.65700-01	129.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	29.000	.21110	244.00	.1683	.2035	.2273	48.36	8.138	.4223	572.2	.2004-02
0	29.200	.72400-01	133.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.300	.79500-01	136.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.600	.92500-01	143.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.900	.12100	198.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	30.200	.16480	214.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	30.200	.18700	229.00	.2538	.3071	.3431	48.21	12.24	.4240	574.5	.3024-02
5	30.300	.21010	242.00	.2007	.2428	.2713	48.25	9.684	.4236	573.9	.2392-02
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.11100-01	83.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	32.100	.21010	241.00	.1580	.1913	.2138	48.10	7.601	.4253	576.2	.1884-02
0	32.200	.16480	213.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	32.200	.18700	228.00	.2067	.2504	.2799	47.99	9.922	.4265	577.9	.2465-02
0	32.300	.12100	197.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.12300	194.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.12730	208.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.13420	209.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10000+00	147.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10110	184.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10630	193.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A205)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	32.500	.85900-01	183.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.500	.92500-01	144.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.600	.79500-01	137.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.600	.80800-01	176.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.700	.67400-01	132.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.700	.72400-01	134.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.800	.65700-01	130.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.800	.16680	210.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	32.800	.18880	225.00	.9457-01	.1145	.1280	48.05	4.545	.4258	577.0	.1128-02
5	32.800	.21170	239.00	.9304-01	.1127	.1260	48.01	4.467	.4264	577.7	.1110-02
0	32.900	.58600-01	118.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.900	.60400-01	122.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.900	.61300-01	171.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.000	.53500-01	115.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.200	.46800-01	111.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.400	.42800-01	166.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.500	.40100-01	99.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.600	.38300-01	97.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.700	.36700-01	96.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	34.700	.18700	227.00	.2167	.2625	.2935	48.00	10.40	.4265	577.9	.2585-02
5	34.700	.21010	240.00	.1516	.1837	.2055	47.85	7.254	.4283	580.2	.1809-02
0	34.900	.16480	212.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.100	.10000+00	148.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.300	.22100-01	160.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.300	.92500-01	145.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	35.400	.18800	231.00	.1902	.2303	.2575	47.99	9.127	.4265	577.9	.2268-02
0	35.500	.12100	196.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.600	.16580	216.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.800	.80600-01	138.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	35.900	.21310	247.00	.1130	.1368	.1529	48.14	5.442	.4248	575.6	.1347-02
5	36.000	.19040	235.00	.1481	.1794	.2005	48.03	7.113	.4261	577.4	.1766-02
0	36.200	.72400-01	135.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.200	.16810	220.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.300	.12200	200.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.600	.65700-01	131.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	36.700	.18700	226.00	.1912	.2315	.2589	47.98	9.171	.4267	578.2	.2280-02
0	36.900	.10110	187.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.900	.16490	211.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.000	.60400-01	123.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A205)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	37.000	.12440	204.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.100	.58600-01	119.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	37.200	.21310	246.00	.1221	.1478	.1652	48.10	5.872	.4253	576.3	.1455-02
5	37.300	.19040	234.00	.1578	.1912	.2138	47.98	7.573	.4267	578.1	.1882-02
0	37.600	.53500-01	116.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.600	.16810	219.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.800	.10270	150.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.900	.12100	195.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.000	.80300-01	179.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.500	.46800-01	112.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.600	.12440	203.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.700	.10000+00	185.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.900	.82200-01	141.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.300	.41600-01	104.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.500	.10270	190.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.600	.16810	218.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	39.900	.19040	233.00	.1208	.1463	.1636	47.95	5.792	.4271	578.6	.1441-02
0	40.100	.79500-01	177.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.200	.12440	202.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	41.100	.60700-01	173.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	41.100	.82200-01	142.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	42.300	.10270	189.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	42.600	.59600-01	172.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.200	.42000-01	168.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.600	.62900-01	129.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	45.000	.22900-01	8.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	46.100	.62900-01	174.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	47.700	.40800-01	167.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	48.400	.44200-01	109.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	65.200	.24700-01	162.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	90.000	.91000-02	44.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	90.000	.11100-01	45.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	90.000	.13100-01	46.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H!/HREF (R3A205)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
5	90.000	.15000-01	47.000	.9436	1.147	1.285	47.22	44.56	.4355	590.0	.1129-01
5	90.000	.17000-01	48.000	.8655	1.051	1.178	47.32	40.95	.4347	588.5	.1035-01
5	90.000	.20900-01	50.000	.8036	.9761	1.094	47.32	38.03	.4343	588.4	.9607-02
5	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	90.000	.26900-01	53.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	90.000	.28800-01	54.000	.6380	.7747	.8676	47.42	30.25	.4332	587.0	.7625-02
5	90.000	.32800-01	55.000	.3131	.3798	.4251	47.63	14.91	.4307	583.6	.3738-02
5	90.000	.36700-01	56.000	.4402	.5343	.5982	47.51	20.91	.4321	585.5	.5259-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	135.00	.19000-01	49.000	.8206	.9970	1.117	47.29	38.81	.4347	588.9	.9812-02
5	135.00	.22900-01	51.000	.7495	.9103	1.020	47.36	35.50	.4338	587.8	.8960-02
5	180.00	.91000-02	23.000	.2096	.2553	.2865	46.70	9.787	.4415	598.2	.2511-02
5	180.00	.11100-01	24.000	.8133	.9883	1.107	47.26	38.44	.4351	589.5	.9726-02
5	180.00	.13100-01	25.000	1.235	1.498	1.677	47.54	58.69	.4318	585.1	.1475-01
5	180.00	.15000-01	26.000	1.157	1.403	1.570	47.71	55.19	.4298	582.3	.1381-01
5	180.00	.17000-01	27.000	.8948	1.086	1.215	47.59	42.58	.4312	584.3	.1069-01
5	180.00	.19000-01	28.000	.8342	1.012	1.132	47.65	39.75	.4305	583.2	.9961-02
5	180.00	.20900-01	29.000	.7938	.9623	1.077	47.78	37.92	.4290	581.3	.9474-02
5	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	180.00	.28800-01	32.000	.6425	.7782	.8701	48.00	30.84	.4264	577.8	.7663-02
5	180.00	.32800-01	33.000	.5646	.6836	.7641	48.09	27.15	.4255	576.5	.6731-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	270.00	.77000-01	30.000	.7388	.8937	.9989	48.29	35.67	.4231	573.3	.8802-02
5	270.00	.91000-02	63.000	.7648	.9291	1.041	47.31	36.19	.4344	588.6	.9144-02
5	270.00	.11100-01	64.000	1.258	1.526	1.708	47.57	59.83	.4315	584.6	.1502-01
5	270.00	.13100-01	65.000	1.111	1.346	1.505	47.86	53.16	.4281	580.0	.1325-01
5	270.00	.17000-01	67.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	270.00	.20900-01	69.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	270.00	.24900-01	71.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
5	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	315.00	.15000-01	66.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
5	315.00	.22900-01	70.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

E.T. OGIVE

PARAMETRIC DATA

ALPHA = .0000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
1	.0000	.0000	5.300	.4349+07	409.8	1429.	350.9	.5365	221.0	.2037-03	3862.	.2750-01
4	.0000	.0000	5.300	.4832+07	410.2	1339.	327.5	.5399	206.2	.2197-03	3731.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
1	.0000	.2606
4	.0000	.2596

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
1	.00000	.91000-02	1.0000	.4361	.5224	.5798	55.24	24.09	.3950	577.6	.5370-02
1	.00000	.11100-01	2.0000	1.151	1.377	1.527	55.61	64.01	.3910	571.8	.1416-01
1	.00000	.13100-01	3.0000	.2804	.3351	.3714	55.96	15.69	.3873	566.4	.3447-02
1	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	.00000	.17000-01	5.0000	.8525	1.017	1.126	56.49	48.15	.3817	558.3	.1046-01
1	.00000	.19000-01	6.0000	.8329	.9930	1.099	56.65	47.18	.3801	555.8	.1022-01
1	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	.00000	.24900-01	9.0000	.7986	.9515	1.052	56.88	45.42	.3776	552.2	.9791-02
1	.00000	.26900-01	10.000	.7183	.8557	.9462	56.92	40.89	.3772	551.6	.8806-02
1	.00000	.28800-01	11.000	.5733	.6830	.7553	56.88	32.61	.3776	552.2	.7028-02
4	.00000	.32800-01	12.000	.6612	.7973	.8888	49.76	32.90	.4141	565.3	.7842-02
4	.00000	.36700-01	13.000	.5825	.7022	.7826	49.83	29.03	.4133	564.1	.6907-02
4	.00000	.40600-01	14.000	.6313	.7612	.8485	49.77	31.42	.4140	565.1	.7487-02
4	.00000	.48500-01	15.000	.5853	.7056	.7864	49.83	29.17	.4133	564.2	.6941-02
4	.00000	.56400-01	16.000	.5391	.6498	.7242	49.83	26.86	.4133	564.1	.6392-02
4	.00000	.76100-01	17.000	.3865	.4660	.5193	49.81	19.25	.4136	564.5	.4583-02
4	.00000	.95800-01	18.000	.3306	.3986	.4444	49.75	16.45	.4142	565.4	.3921-02
4	.00000	.11550	19.000	.2543	.3070	.3424	49.54	12.60	.4167	568.7	.3019-02
4	.00000	.16480	20.000	.1395	.1684	.1879	49.49	6.906	.4172	569.4	.1656-02
4	.00000	.18450	21.000	.1073	.1294	.1443	49.62	5.322	.4157	567.5	.1273-02

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A214)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
4	.00000	.21400	22.000	.6793-01	.8189-01	.9127-01	49.83	3.385	.4133	564.2	.8055-03
0	2.0000	.24700-01	165.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.15000-01	157.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.17600-01	158.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.8000	.24700-01	164.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	10.000	.26900-01	90.000	.6176	.7367	.8154	56.48	34.88	.3818	558.4	.7579-02
1	10.000	.30800-01	92.000	.5964	.7109	.7864	56.74	33.84	.3791	554.4	.7315-02
1	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	14.600	.44200-01	169.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	18.500	.44200-01	106.00	.5363	.6393	.7072	56.70	30.41	.3795	554.9	.6578-02
0	19.600	.62900-01	175.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	19.800	.40800-01	101.00	.5547	.6616	.7322	56.55	31.37	.3811	557.4	.6807-02
1	20.000	.24900-01	89.000	.3859	.4605	.5098	56.39	21.76	.3828	559.8	.4737-02
1	20.000	.28800-01	91.000	.4128	.4925	.5451	56.47	23.31	.3820	558.6	.5067-02
1	20.000	.32800-01	93.000	.4917	.5866	.6492	56.50	27.78	.3816	558.1	.6034-02
0	21.800	.82200-01	182.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	22.200	.62900-01	125.00	.4317	.5145	.5690	56.78	24.51	.3786	553.7	.5293-02
1	22.400	.44200-01	107.00	.4912	.5858	.6482	56.59	27.80	.3806	556.7	.6027-02
0	22.600	.10270	192.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	23.000	.42000-01	105.00	.5863	.6995	.7742	56.45	33.10	.3821	558.8	.7196-02
1	23.400	.59600-01	120.00	.4684	.5584	.6177	56.69	26.55	.3796	555.1	.5745-02
4	23.900	.21310	250.00	.7688-01	.9269-01	.1033	49.79	3.828	.4138	564.8	.9117-03
1	24.100	.82200-01	139.00	.3752	.4472	.4946	56.78	21.31	.3786	553.7	.4601-02
0	24.400	.12440	207.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	24.800	.16810	223.00	.1427	.1722	.1921	49.56	7.072	.4164	568.4	.1694-02
1	24.900	.62900-01	126.00	.2500	.2983	.3301	56.48	14.12	.3818	558.4	.3069-02
0	25.000	.79500-01	178.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.300	.10000+00	186.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.300	.10270	191.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	25.500	.60700-01	124.00	.5265	.6279	.6943	56.59	29.79	.3807	556.7	.6460-02
0	26.000	.12440	206.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	26.300	.82200-01	140.00	.3642	.4341	.4802	56.74	20.67	.3791	554.4	.4467-02
0	26.700	.12100	199.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	26.800	.16810	222.00	.1785	.2154	.2403	49.54	8.842	.4167	568.7	.2119-02
4	27.000	.19040	237.00	.1459	.1760	.1962	49.61	7.237	.4158	567.5	.1731-02
4	27.100	.21310	249.00	.1047	.1263	.1407	49.74	5.208	.4143	565.5	.1242-02
0	27.200	.80300-01	180.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

DATE 28 AUG 79

AMES 3.5-237 FH-16 COLLATION DECK

(R3A214)

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
						HI/HREF					
0	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	27.400	.40100-01	98.000	.5710	.6816	.7547	56.32	32.16	.3835	560.9	.7011-02
0	27.400	.16480	215.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	27.600	.41600-01	102.00	.6027	.7195	.7967	56.28	33.92	.3839	561.4	.7401-02
0	27.600	.12440	205.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	27.600	.18700	230.00	.1696	.2046	.2282	49.56	8.404	.4164	568.3	.2012-02
4	27.700	.21010	243.00	.1353	.1632	.1820	49.61	6.710	.4158	567.6	.1605-02
0	27.900	.10110	188.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	28.000	.46800-01	110.00	.2435	.2907	.3218	56.32	13.72	.3835	560.8	.2990-02
4	28.200	.16810	221.00	.2288	.2762	.3081	49.48	11.32	.4173	569.7	.2716-02
0	28.300	.12200	201.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	28.300	.19040	236.00	.1244	.1502	.1675	49.54	6.163	.4167	568.7	.1477-02
1	28.400	.53500-01	114.00	.3946	.4709	.5212	56.42	22.27	.3824	559.3	.4844-02
4	28.400	.21310	248.00	.9564-01	.1154	.1287	49.62	4.746	.4157	567.4	.1135-02
1	28.700	.58600-01	117.00	.4913	.5862	.6488	56.45	27.73	.3822	558.9	.6030-02
1	28.800	.60400-01	121.00	.5637	.6725	.7443	56.48	31.84	.3818	558.4	.6918-02
0	28.800	.16580	217.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	28.900	.18800	232.00	.1759	.2123	.2368	49.52	8.712	.4168	569.0	.2088-02
1	29.000	.65700-01	129.00	.2520	.3007	.3329	56.41	14.22	.3826	559.5	.3093-02
4	29.000	.21110	244.00	.1186	.1431	.1596	49.61	5.884	.4158	567.6	.1407-02
1	29.200	.72400-01	133.00	.2523	.3011	.3333	56.42	14.24	.3825	559.3	.3097-02
1	29.300	.79500-01	136.00	.5082	.6060	.6705	56.61	28.77	.3804	556.3	.6234-02
1	29.600	.92500-01	143.00	.3175	.3787	.4191	56.54	17.95	.3812	557.5	.3896-02
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.900	.12100	198.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	30.200	.16480	214.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	30.200	.18700	229.00	.1849	.2232	.2490	49.48	9.151	.4173	569.6	.2195-02
4	30.300	.21010	242.00	.1403	.1693	.1888	49.52	6.946	.4169	569.0	.1665-02
1	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	31.500	.11100-01	83.000	1.499	1.795	1.991	55.37	82.98	.3936	575.5	.1845-01
1	31.500	.14200-01	84.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	31.500	.16000-01	85.000	1.979	2.378	2.645	54.39	107.7	.4039	590.7	.2443-01
1	31.500	.17600-01	86.000	1.291	1.552	1.727	54.19	69.97	.4060	593.8	.1595-01
1	31.500	.19400-01	87.000	.8669	1.043	1.161	53.99	46.80	.4082	596.9	.1071-01
4	32.100	.21010	241.00	.1175	.1420	.1584	49.34	5.799	.4189	571.7	.1396-02
0	32.200	.16480	213.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	32.200	.18700	228.00	.1773	.2142	.2391	49.26	8.736	.4198	573.0	.2107-02
0	32.300	.12100	197.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.12300	194.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.12730	208.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.13420	209.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10000+00	147.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A214)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	32.400	.10110	184.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10630	193.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.500	.85800-01	183.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	32.500	.92500-01	144.00	.3241	.3868	.4281	56.41	18.29	.3825	559.4	.3979-02
1	32.600	.79500-01	137.00	.5054	.6031	.6676	56.41	28.51	.3826	559.5	.6204-02
0	32.600	.80800-01	176.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	32.700	.67400-01	132.00	.2453	.2928	.3241	56.35	13.82	.3832	560.4	.3011-02
1	32.700	.72400-01	134.00	.2670	.3186	.3527	56.39	15.06	.3828	559.7	.3277-02
1	32.800	.65700-01	130.00	.1889	.2255	.2497	56.33	10.64	.3834	560.7	.2319-02
0	32.800	.16680	210.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	32.800	.18880	225.00	.7734-01	.9342-01	.1043	49.32	3.814	.4192	572.2	.9186-03
4	32.800	.21170	239.00	.7184-01	.8680-01	.9689-01	49.25	3.538	.4199	573.1	.8535-03
1	32.900	.58600-01	118.00	.4597	.5487	.6075	56.31	25.39	.3836	560.9	.5644-02
1	32.900	.60400-01	122.00	.3884	.4637	.5134	56.27	21.85	.3841	561.7	.4769-02
0	32.900	.61300-01	171.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	33.000	.53500-01	115.00	.3612	.4316	.4781	56.05	20.25	.3863	565.0	.4438-02
1	33.200	.46800-01	111.00	.1978	.2362	.2616	56.19	11.11	.3849	562.9	.2429-02
1	33.200	.48300-01	113.00	.2228	.2660	.2946	56.22	12.52	.3846	562.5	.2736-02
0	33.400	.42800-01	166.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	33.500	.40100-01	99.000	.5422	.6475	.7171	56.18	30.46	.3850	563.1	.6660-02
1	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	33.600	.38300-01	97.000	.5464	.6526	.7229	56.11	30.66	.3858	564.2	.6712-02
1	33.700	.36700-01	96.000	.5541	.6618	.7330	56.14	31.11	.3854	563.6	.6807-02
1	33.900	.33800-01	95.000	.4209	.5029	.5571	56.06	23.60	.3862	564.8	.5172-02
4	34.700	.18700	227.00	.1685	.2036	.2273	49.26	8.302	.4198	573.0	.2002-02
4	34.700	.21010	240.00	.1268	.1533	.1711	49.19	6.237	.4206	574.1	.1507-02
0	34.900	.16480	212.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.100	.10000+00	148.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.200	.23900-01	101.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.300	.22100-01	160.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	35.300	.92500-01	145.00	.3436	.4100	.4538	56.41	19.38	.3826	559.5	.4217-02
4	35.400	.18800	231.00	.1632	.1972	.2201	49.26	8.040	.4198	573.0	.1939-02
0	35.500	.12100	196.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.600	.16580	216.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	35.800	.80600-01	138.00	.3934	.4696	.5199	56.33	22.16	.3834	560.7	.4830-02
4	35.900	.21310	247.00	.9681-01	.1169	.1305	49.34	4.777	.4189	571.7	.1150-02
4	36.000	.19040	235.00	.1293	.1563	.1744	49.27	6.372	.4198	572.9	.1537-02
1	36.200	.72400-01	135.00	.2593	.3094	.3425	56.41	14.63	.3825	559.4	.3183-02
0	36.200	.16810	220.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.300	.12200	200.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	36.600	.65700-01	131.00	.2455	.2930	.3244	56.35	13.83	.3832	560.5	.3014-02
4	36.700	.18700	226.00	.1491	.1802	.2011	49.26	7.344	.4199	573.1	.1771-02
0	36.900	.10110	187.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A214)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	36.900	.16480	211.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	37.000	.60400-01	123.00	.4642	.5540	.6134	56.34	26.15	.3834	560.6	.5699-02
0	37.000	.12440	204.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	37.100	.58600-01	119.00	.4731	.5649	.6257	56.19	26.58	.3849	562.9	.5810-02
4	37.200	.21310	246.00	.9954-01	.1202	.1341	49.37	4.915	.4185	571.3	.1182-02
4	37.300	.19040	234.00	.1293	.1562	.1744	49.23	6.363	.4202	573.5	.1536-02
1	37.600	.53500-01	116.00	.4473	.5341	.5916	56.20	25.14	.3848	562.7	.5494-02
0	37.600	.16810	219.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.800	.10270	150.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.900	.12100	195.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.000	.80300-01	179.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	38.500	.46800-01	112.00	.2516	.3005	.3328	56.13	14.12	.3855	563.8	.3091-02
0	38.600	.12440	203.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.700	.10000+00	185.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	38.900	.82200-01	141.00	.3102	.3703	.4101	56.28	17.46	.3839	561.4	.3809-02
1	39.300	.41600-01	104.00	.5084	.6075	.6730	56.02	28.48	.3867	565.5	.6247-02
0	39.500	.10270	190.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.600	.16810	218.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	39.900	.19040	233.00	.1011	.1222	.1364	49.21	4.976	.4203	573.8	.1201-02
0	40.100	.79500-01	177.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.200	.12440	202.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	41.100	.60700-01	173.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	41.100	.82200-01	142.00	.3041	.3631	.4020	56.26	17.11	.3842	561.8	.3734-02
0	42.300	.10270	189.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	42.600	.59600-01	172.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.200	.42000-01	168.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	43.600	.62900-01	128.00	.2612	.3117	.3451	56.33	14.71	.3834	560.7	.3206-02
1	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	45.000	.22900-01	8.0000	1.059	1.265	1.402	55.98	59.28	.3871	566.1	.1301-01
0	46.100	.62900-01	174.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	47.700	.40800-01	167.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
1	48.400	.44200-01	109.00	.4713	.5632	.6240	56.01	26.40	.3868	565.7	.5792-02
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	65.200	.24700-01	162.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	90.000	.91000-02	44.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) HI/HREF (R3A214)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
4	90.000	.11100-01	45.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	90.000	.13100-01	46.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	90.000	.15000-01	47.000	1.047	1.268	1.417	48.66	50.93	.4266	582.3	.1246-01
4	90.000	.17000-01	48.000	.9483	1.149	1.284	48.66	46.14	.4267	582.4	.1129-01
4	90.000	.20900-01	50.000	.8841	1.071	1.197	48.68	43.03	.4265	582.1	.1052-01
4	90.000	.24900-01	52.000	.7009	.8487	.9488	48.73	34.15	.4259	581.3	.8342-02
4	90.000	.26900-01	53.000	.7387	.8947	1.000	48.67	35.96	.4265	582.1	.8794-02
4	90.000	.28800-01	54.000	.7057	.8545	.9553	48.73	34.39	.4259	581.3	.8399-02
4	90.000	.32800-01	55.000	.3458	.4184	.4675	48.93	16.92	.4235	578.1	.4113-02
4	90.000	.36700-01	56.000	.4897	.5928	.6625	48.83	23.92	.4247	579.7	.5827-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	135.00	.19000-01	49.000	.8996	1.090	1.219	48.66	43.79	.4267	582.4	.1071-01
4	135.00	.22900-01	51.000	.8213	.9946	1.112	48.71	40.01	.4260	581.5	.9777-02
4	180.00	.91000-02	23.000	.2308	.2800	.3135	48.24	11.13	.4314	588.9	.2751-02
4	180.00	.11100-01	24.000	1.425	1.726	1.930	48.66	69.32	.4267	582.4	.1696-01
4	180.00	.13100-01	25.000	1.169	1.414	1.580	48.88	57.12	.4242	579.0	.1390-01
4	180.00	.15000-01	26.000	.9820	1.189	1.329	48.79	47.91	.4252	580.4	.1169-01
4	180.00	.17000-01	27.000	.9657	1.168	1.304	49.03	47.34	.4225	576.7	.1148-01
4	180.00	.19000-01	28.000	.9015	1.090	1.218	49.05	44.22	.4222	576.3	.1072-01
4	180.00	.20900-01	29.000	.8407	1.016	1.135	49.17	41.34	.4209	574.5	.9991-02
4	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	180.00	.28800-01	32.000	.6508	.7860	.8770	49.39	32.15	.4183	571.0	.7729-02
4	180.00	.32800-01	33.000	.5503	.6643	.7411	49.47	27.22	.4174	569.8	.6533-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	225.00	.22900-01	30.000	.7943	.9580	1.068	49.70	39.48	.4148	566.2	.9423-02
4	270.00	.91000-02	63.000	.6529	.7903	.8832	48.84	31.89	.4247	579.6	.7768-02
4	270.00	.11100-01	64.000	1.361	1.646	1.838	49.02	66.71	.4225	576.7	.1618-01
4	270.00	.13100-01	65.000	1.237	1.494	1.667	49.30	60.96	.4194	572.4	.1469-01
4	270.00	.17000-01	67.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

(R3A214)

FH16, ARC 3.5-237, ET NOSE (W/PROTUB.) H/HREF

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
4	270.00	.20900-01	69.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	270.00	.24900-01	71.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	315.00	.15000-01	66.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
4	315.00	.22900-01	70.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A305)

E.T. OGIVE

PARAMETRIC DATA

ALPHA = -5.000 BETA = .0000 RN/FT = 5.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT X10 6	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT3	VINF FT/SEC	SCALE
31	-5.000	.0000	5.300	.4481+07	407.0	1396.	342.4	.5338	215.6	.2077-03	3815.	.2750-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540
31	.0000	.2593

TEST DATA

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	.00000	.91000-02	1.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.11100-01	2.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.13100-01	3.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.15000-01	4.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.17000-01	5.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.19000-01	6.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.20900-01	7.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.24900-01	9.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.26900-01	10.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	.00000	.28800-01	11.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	.00000	.32800-01	12.000	.6674	.7377	.8039	54.36	36.28	.3875	553.0	.8109-02
31	.00000	.36700-01	13.000	.5389	.6438	.7133	54.46	29.35	.3864	551.4	.6545-02
31	.00000	.40600-01	14.000	.6298	.7526	.8339	54.40	34.26	.3870	552.2	.7651-02
31	.00000	.48500-01	15.000	.5494	.6564	.7271	54.46	29.92	.3863	551.3	.6673-02
31	.00000	.56400-01	16.000	.5245	.6265	.6940	54.52	28.59	.3857	550.5	.6369-02
31	.00000	.76100-01	17.000	.4114	.4913	.5442	54.56	22.44	.3853	549.9	.4995-02
31	.00000	.95800-01	18.000	.3415	.4079	.4517	54.58	18.64	.3850	549.5	.4147-02
31	.00000	.11550	19.000	.2797	.3342	.3703	54.43	15.23	.3866	551.8	.3397-02
31	.00000	.16480	20.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	.00000	.18050	21.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	.00000	.21900	22.000	.9098-01	.1086	.1203	54.61	4.988	.3867	549.1	.1104-02
0	2.0000	.24700-01	165.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A305)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT2SEC	QDOT BTU/FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	9.0000	.15000-01	157.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.17600-01	158.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.0000	.19400-01	159.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	9.8000	.24700-01	164.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.22900-01	88.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.26900-01	90.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.30800-01	92.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	10.000	.34700-01	94.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.12100-01	151.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	12.000	.17600-01	152.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	13.000	.19400-01	153.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	14.600	.44200-01	169.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	18.500	.44200-01	106.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	19.600	.62900-01	175.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	19.800	.40800-01	101.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	20.000	.24900-01	89.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	20.000	.28800-01	91.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	20.000	.32800-01	93.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	21.800	.82200-01	182.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	22.200	.62900-01	125.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	22.400	.44200-01	107.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	22.600	.10270	192.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	23.000	.42000-01	105.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	23.400	.59600-01	120.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	23.900	.21310	250.00	.8670-01	.1037	.1149	54.22	4.701	.3889	555.0	.1054-02
0	24.100	.82200-01	139.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	24.400	.12440	207.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	24.400	.19040	238.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	24.800	.16810	223.00	.1500	.1794	.1989	54.10	8.115	.3902	556.9	.1824-02
0	24.900	.62900-01	126.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.000	.79500-01	178.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.300	.10000+00	186.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.300	.10270	191.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	25.500	.60700-01	124.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	26.000	.12440	206.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	26.300	.82200-01	140.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	26.700	.12100	199.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	26.800	.16810	222.00	.1396	.1670	.1852	54.09	7.552	.3903	557.1	.1697-02
31	27.000	.19040	237.00	.1116	.1335	.1481	54.09	6.038	.3904	557.2	.1357-02
31	27.100	.21310	249.00	.7980-01	.9543-01	.1058	54.20	4.325	.3892	555.4	.9700-03
0	27.200	.80300-01	180.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.200	.10270	149.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.400	.40100-01	98.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A305)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	27.400	.16480	215.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.600	.41600-01	102.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	27.600	.12440	205.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	27.600	.18700	230.00	.1070	.1280	.1420	54.08	5.788	.3904	557.2	.1301-02
31	27.700	.21010	243.00	.9110-01	.1090	.1208	54.07	4.926	.3905	557.3	.1108-02
0	27.900	.10110	188.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	28.000	.46800-01	110.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	28.200	.16810	221.00	.1443	.1726	.1913	54.09	7.803	.3904	557.2	.1754-02
0	28.300	.12200	201.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	28.300	.19040	236.00	.9768-01	.1168	.1296	54.08	5.283	.3904	557.2	.1188-02
0	28.400	.53500-01	114.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	28.400	.21310	248.00	.7887-01	.9433-01	.1046	54.15	4.271	.3897	556.2	.9587-03
0	28.700	.58600-01	117.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	28.800	.60400-01	121.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	28.800	.16580	217.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	28.900	.18800	232.00	.1012	.1210	.1342	54.07	5.469	.3906	557.4	.1230-02
0	29.000	.65700-01	129.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	29.000	.21110	244.00	.7777-01	.9303-01	.1031	54.09	4.206	.3904	557.2	.9455-03
0	29.200	.72400-01	133.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.300	.79500-01	136.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.600	.92500-01	143.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.700	.10000+00	146.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	29.900	.12100	198.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	30.200	.16480	214.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	30.200	.18700	229.00	.9622-01	.1151	.1276	54.08	5.204	.3904	557.2	.1170-02
31	30.300	.21010	242.00	.8289-01	.9916-01	.1099	54.08	4.482	.3905	557.3	.1008-02
0	31.500	.91000-02	82.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.11100-01	83.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.14200-01	84.500	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.16000-01	85.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.17600-01	86.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	31.500	.19400-01	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	32.100	.21010	241.00	.7998-01	.9570-01	.1061	54.01	4.320	.3913	558.4	.9727-03
0	32.200	.16480	213.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	32.200	.17860	224.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	32.200	.18700	228.00	.1047	.1253	.1390	54.01	5.656	.3913	558.4	.1274-02
0	32.300	.12100	197.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.12300	194.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.12730	208.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.300	.13420	209.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10000+00	147.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10110	184.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.400	.10630	193.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A305)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	32.500	.85800-01	183.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.500	.92500-01	144.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.600	.79500-01	137.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.600	.80900-01	176.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.700	.67400-01	132.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.700	.72400-01	134.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.800	.65700-01	130.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.800	.16680	210.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	32.800	.18880	225.00	.9116-01	.1091	.1209	54.07	4.929	.3906	557.4	.1108-02
31	32.800	.21170	239.00	.7831-01	.9372-01	.1040	53.95	4.225	.3919	559.3	.9525-03
0	32.900	.59600-01	118.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.900	.60400-01	122.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	32.900	.61300-01	171.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.000	.53500-01	115.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.200	.46800-01	111.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.200	.48300-01	113.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.400	.42800-01	166.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.500	.40100-01	99.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.500	.41600-01	103.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.600	.38300-01	97.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.700	.36700-01	96.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	33.900	.33800-01	95.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	34.700	.18700	227.00	.9140-01	.1094	.1213	53.96	4.932	.3918	559.2	.1112-02
31	34.700	.21010	240.00	.8587-01	.1028	.1140	53.86	4.625	.3928	560.6	.1045-02
0	34.900	.16480	212.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.100	.10000+00	148.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.200	.23900-01	161.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.300	.22100-01	160.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.300	.92500-01	145.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	35.400	.18800	231.00	.1085	.1299	.1440	53.99	5.861	.3914	558.6	.1320-02
0	35.500	.12100	196.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.600	.16580	216.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	35.800	.80600-01	138.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	35.900	.21310	247.00	.8517-01	.1019	.1130	53.99	4.599	.3914	558.6	.1036-02
31	36.000	.19040	235.00	.1131	.1353	.1500	53.99	6.105	.3914	558.6	.1375-02
0	36.200	.72400-01	135.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.200	.16810	220.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.300	.12200	200.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.600	.65700-01	131.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	36.700	.18700	226.00	.1121	.1342	.1488	53.95	6.048	.3919	559.2	.1364-02
0	36.900	.10110	187.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	36.900	.16480	211.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.000	.60400-01	123.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A305)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
0	37.000	.12440	204.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.100	.58600-01	119.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	37.200	.21310	246.00	.8518-01	.1019	.1131	53.98	4.598	.3916	558.9	.1036-02
31	37.300	.19040	234.00	.1126	.1347	.1494	53.92	6.069	.3922	559.7	.1369-02
0	37.400	.53500-01	116.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.600	.16810	219.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.800	.10270	150.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	37.900	.12100	195.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.000	.80300-01	179.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.500	.46800-01	112.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.600	.12440	203.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.700	.10000+00	185.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	38.900	.82200-01	141.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.300	.41600-01	104.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.500	.10270	190.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.600	.16810	218.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	39.700	.40100-01	100.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	39.900	.19040	233.00	.1068	.1278	.1418	53.93	5.760	.3922	559.7	.1299-02
0	40.100	.79500-01	177.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.200	.12440	202.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	40.300	.21310	245.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	40.900	.62900-01	127.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	41.100	.60700-01	173.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	41.100	.82200-01	142.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	42.300	.10270	189.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	42.600	.59600-01	172.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.200	.42000-01	168.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.400	.82200-01	181.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	43.600	.62900-01	128.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	44.600	.44200-01	108.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	45.000	.22900-01	8.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	46.100	.62900-01	174.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	47.700	.40800-01	167.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	48.400	.44200-01	109.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	50.000	.19400-01	156.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.12100-01	154.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.000	.17600-01	155.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	51.900	.44800-01	170.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	53.200	.24700-01	163.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	65.200	.24700-01	162.00	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	90.000	.91000-02	44.000	.6129	.7367	.8196	52.72	32.31	.4053	578.4	.7481-02
31	90.000	.11100-01	45.000	1.210	1.454	1.617	52.78	63.84	.4046	577.5	.1476-01
31	90.000	.13100-01	46.000	1.062	1.275	1.418	52.90	56.16	.4034	575.6	.1295-01

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A305)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
31	90.000	.15000-01	47.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	90.000	.17000-01	48.000	.8048	.9665	1.074	52.98	42.63	.4025	574.4	.9816-02
31	90.000	.20900-01	50.000	.8196	.9841	1.094	53.05	43.47	.4017	573.3	.9995-02
31	90.000	.24900-01	52.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	90.000	.26900-01	53.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	90.000	.28800-01	54.000	.6476	.7769	.8630	53.29	34.51	.3991	569.6	.7892-02
31	90.000	.32800-01	55.000	.3480	.4170	.4630	53.57	18.64	.3960	565.1	.4237-02
31	90.000	.36700-01	56.000	.5028	.6027	.6692	53.49	26.89	.3969	566.4	.6123-02
0	90.000	.40600-01	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.48500-01	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.56400-01	59.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.76100-01	60.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.95800-01	61.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	90.000	.11550	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	135.00	.19000-01	49.000	.8037	.9646	1.072	53.17	42.73	.4004	571.4	.9798-02
31	135.00	.22900-01	51.000	.7507	.9004	1.000	53.34	40.04	.3985	568.8	.9146-02
31	180.00	.91000-02	23.000	.1898	.2282	.2539	52.68	9.998	.4058	579.1	.2317-02
31	180.00	.11100-01	24.000	.6582	.7899	.8777	53.18	35.00	.4003	571.3	.8024-02
31	180.00	.13100-01	25.000	1.226	1.470	1.632	53.47	65.58	.3971	566.7	.1494-01
31	180.00	.15000-01	26.000	1.161	1.391	1.545	53.56	62.19	.3961	565.3	.1414-01
31	180.00	.17000-01	27.000	.8598	1.030	1.143	53.70	46.17	.3947	563.2	.1046-01
31	180.00	.19000-01	28.000	.8123	.9730	1.080	53.73	43.65	.3942	562.6	.9887-02
31	180.00	.20900-01	29.000	.7822	.9363	1.039	53.89	42.15	.3925	560.2	.9515-02
31	180.00	.24900-01	31.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	180.00	.28800-01	32.000	.6396	.7647	.8476	54.22	34.68	.3890	555.1	.7773-02
31	180.00	.32800-01	33.000	.5589	.6680	.7404	54.30	30.35	.3881	553.9	.6791-02
0	180.00	.36700-01	34.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.40600-01	35.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.48500-01	36.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.56400-01	37.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.76100-01	38.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.95800-01	39.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.11550	40.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.16480	41.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.18450	42.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	180.00	.21400	43.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	225.00	.22900-01	30.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	270.00	.91000-02	63.000	.6334	.7597	.8438	53.34	33.78	.3985	568.7	.7717-02
31	270.00	.11100-01	64.000	1.157	1.386	1.539	53.61	62.01	.3956	564.6	.1408-01
31	270.00	.13100-01	65.000	1.075	1.287	1.427	53.96	58.03	.3917	559.0	.1308-01
31	270.00	.17000-01	67.000	.8950	1.069	1.185	54.46	48.74	.3864	551.4	.1087-01
31	270.00	.20900-01	69.000	.8204	.9794	1.084	54.67	44.86	.3840	548.0	.9958-02
31	270.00	.24900-01	71.000	.7525	.8983	.9946	54.70	41.16	.3838	547.7	.9134-02

FH16, ARC 3.5-237, ET NOSE (CLEAN) HU/HREF (R3A305)

RUN NUMBER	THETA	X/L	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
31	270.00	.26900-01	72.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.28800-01	73.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.32800-01	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.36700-01	75.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.40600-01	76.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.48500-01	77.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.56400-01	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.76100-01	79.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.95800-01	80.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
0	270.00	.11550	81.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	315.00	.15000-01	66.000	.9577	1.145	1.270	54.16	51.87	.3896	556.0	.1164-01
31	315.00	.19000-01	68.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
31	315.00	.22900-01	70.000	.7842	.9362	1.037	54.67	42.37	.3841	548.1	.9518-02